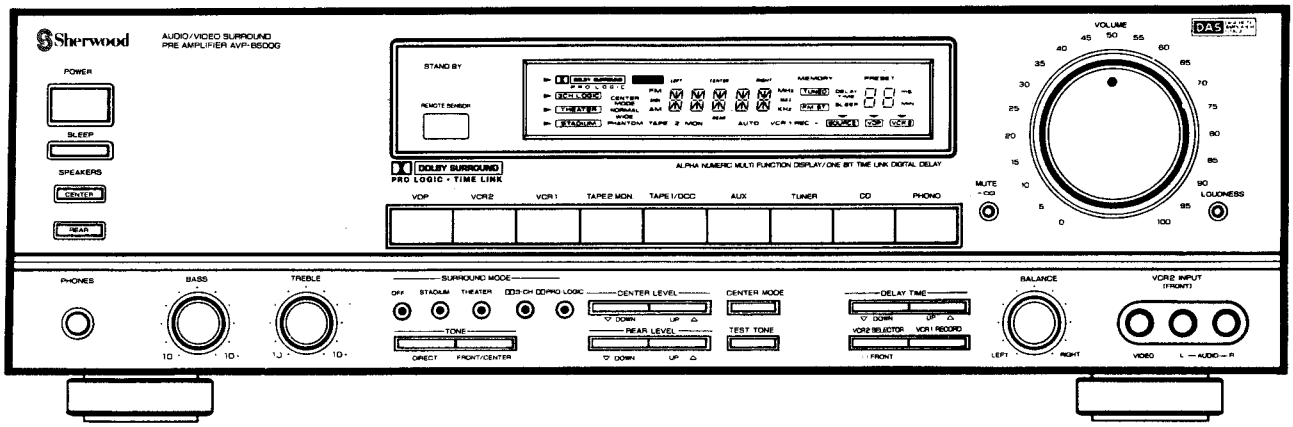
SERVICE MANUAL

AVP-8500G/B

AUDIO/VIDEO SURROUND PRE AMPLIFIER



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Sherwood

SAFETY PRECAUTIONS

WARNING

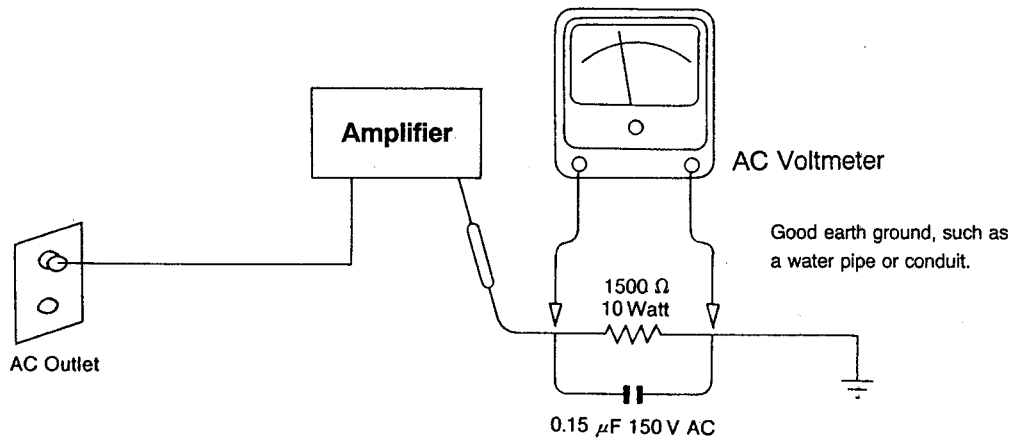
Before servicing this unit, familiarize yourself with the following precautions:

1. Many electrical and mechanical parts in this player have special safety characteristics that often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by ⚠ in the schematic diagram and the parts list.

   Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

2. Before returning the set to the customer, always do an AC leakage current check on the exposed metal parts of the cabinet, such as terminals, screw heads, and metal overlays, to be sure the set is safe to operate without danger of electrical shock.
   Plug the AC line cord directly into a AC outlet (Do not use a line isolation transformer during this check.)
   Be sure your AC voltmeter has a sensitivity of 5000 Ω per volt or greater. Then connect a 1500 Ω 10 watt resistor, paralleled by a 0.15 μF 150 V AC capacitor, between a known good earth ground (water pipe, or conduit) and the exposed metalic parts, one at a time. Measure the AC voltage across the combination of a 1500 Ω resistor and a 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metalic part. Voltage measured must not exceed 0.75 V RMS. This corresponds to 0.2 mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

At 5000 Ω per volt or greater sensitivity,
the reading should not exceed 0.75 V.



Place the probe on each exposed metallic part.

SPECIFICATIONS

Front Section		Unit	Limit
RMS output power:			
at distortion below 0.5% 1 kHz			
both channels driven at 8 Ω		W	50
Total harmonic distortion			
at 50 W output, 20 Hz - 20 kHz.		%	0.01
Frequency response			
at 8 Ω load, 1 W output, -3 dB.		Hz	10 - 80 k
Input sensitivity at 50 W output 1 kHz:			
	CD	mV	160 ± 30
	PHONO	mV	2.5 ± 0.5
Phono amp overload at 1% THD, 1 kHz.		mV	130
Loudness compensation at -30 dB volume:			
	100 Hz	dB	6 ± 2
	10 kHz	dB	3 ± 1
Channel separation:			
	1 kHz	dB	60
	10 kHz	dB	57
Signal to noise ratio(WTD/UNWTD):			
	CD	dB	98/88
	PHONO	dB	75/70

Center Section		Unit	Limit
RMS output power:			
at distortion below 0.05% 1 kHz, 8Ω.		W	100
Signal to noise ratio(WTD/UNWTD)		dB	85/79
Frequency response 8 Ω load, 1 W output			
at -3 dB (Prologic):	WIDE	Hz	30 - 15 k
	NORMAL	Hz	100 - 15 k

Rear Section		Unit	Limit
RMS output power:			
at distortion below 0.05% 1 kHz			
both channels driven at 8 Ω		W	50
Signal to noise ratio(WTD/UNWTD)		dB	78/70
Frequency response 8 Ω load, 1 W output			
at -3 dB (Prologic):	WIDE	Hz	100 - 7 k

General

Speaker Load impedance ..... 8 Ω
Power conumption ..... 400 W
Dimensions(HxWxD) ..... 440x140x380 mm
Weight (lbs) ..... 12 kg (5.44 lbs)

Power requirements :

A: 120 V 60 Hz for American/Canadian version
B: 120/220 V 60/50 Hz for multy voltage version(switchable)
D: 230 V 50 Hz for German General European version
E: 240 V 50 Hz for UK/Australia version
G: 220 V 50 Hz for Other Area

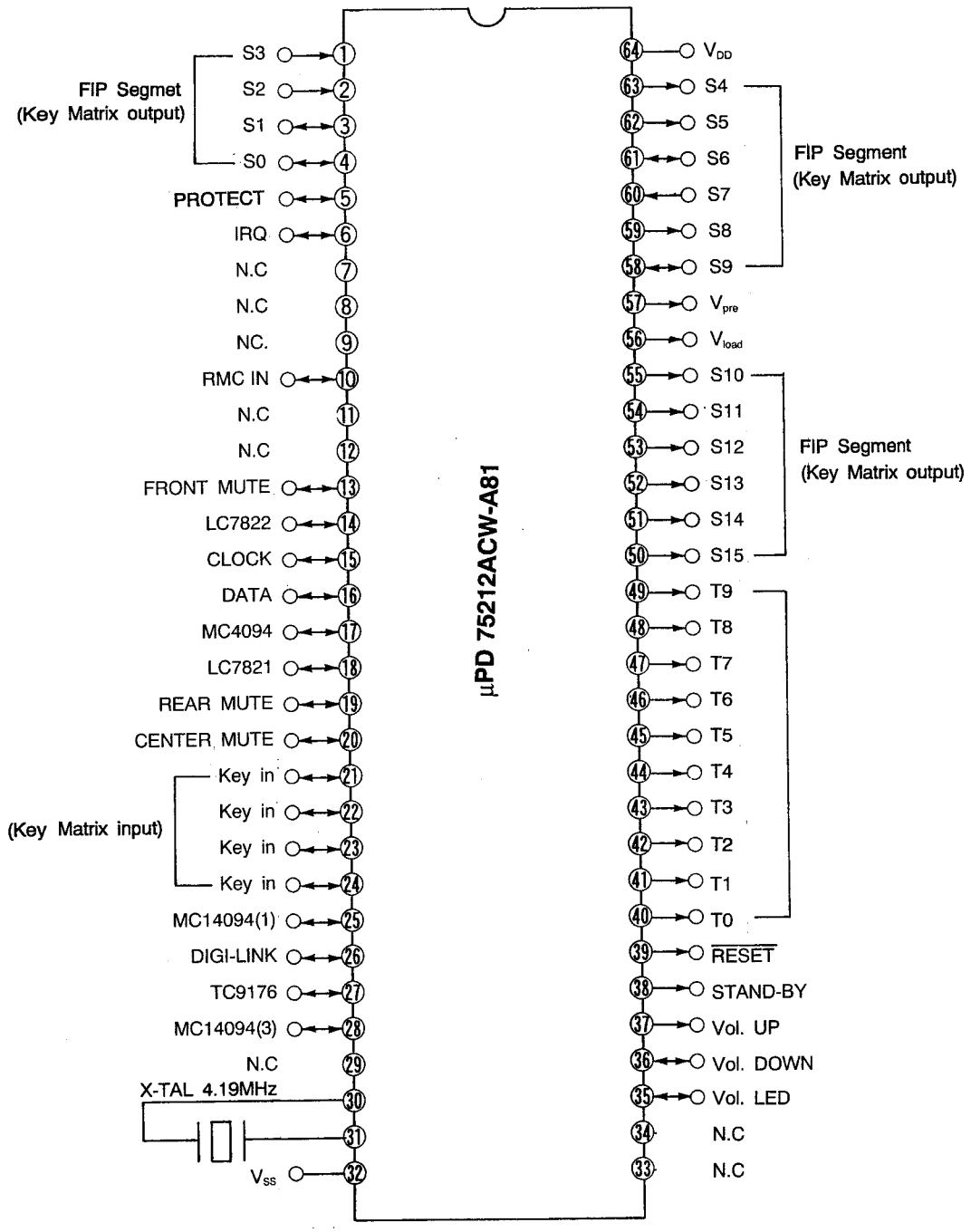
Note :

1. Nominal specs represent the design specs. All units should be able to approximate these some will exceed and some may drop slightly below these specs. Limit specs represent the absolute worst condition that still might be considered acceptable: in no case should a unit fail to meet limit specs.
2. This manual is based on the Generl Europ (D) standard, and provides information on regional circuit modification through the use of alternate schematic diagrams or wiring diagrams, and information on regional component variations through the use of parts lists. Design and specifications subject to change without notice.

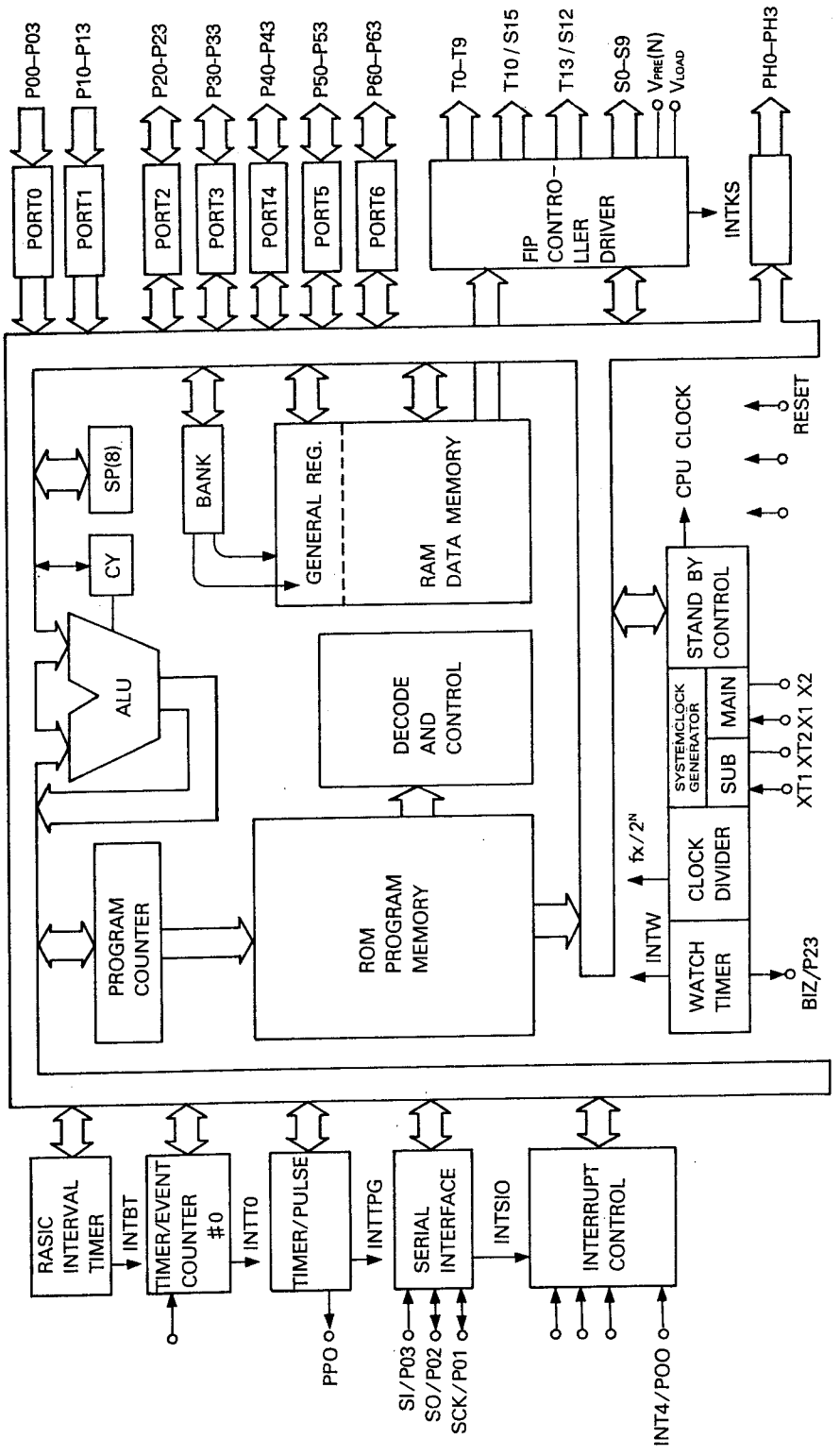
CIRCUIT DESCRIPTION

IC501: μPD75212ACW-A81

1. Pin Assignment



2. Block Diagram



3. Pin Functions

Pin	I/O	Description
P5(P00/INT4)	Input	These pins Can be used as 4-bit input port
P6(P01/SCK)	Input/Output	
P7(P02/SO)	Input/Output	
P8(P03/S1)	Input	
P9(P10/INT0)	Input	These pins Can be used as 4-bit input port
P10(P11/INT1)	Input	
P11(P12/INT2)	Input	
P12(P13/T10)	Input	
P13~P16 (P20~P22, P23/Buz)	Input/ Output	These pins can be used as 4-bit I/O port 2. When used as an output the data is latched. When used as an input port the port outputs are three-state. $P2_3$ can also be used to output square waves for a buzzer, Reset causeds these pins to default to the port 2 input
P17~P20 (P30~P33)	Input/ Output	These pins are used for input/output port 3. Each bitin this port can be independently programmed to be either an input or output. This port has latched output
P21~P24 (P40~P43)	Input/ Output	These pins are used for input/output port 4 : this port has latched outputs. Port 4 outputs can directly drive an LED. Ports 4 and 5 can be paired to gether to function as one 8-bit port. A reset causes this port to be in the input mode.
P25~P28 (P40~P43)	Input/ Output	These pins are used for input/output port 4 : this port has latched outputs. Port 4 outputs can directly dirve and LED, Ports 4 and 5 can be paired together to function as one 8-bit port. A reset caused this port be in the input mode.
P29(PP0)	Output	This is an output signal from the timer/pulse generator, and can be either PWM(Pulse-Width Modulated) or a square wave. This pin can also be used as a 1-bit output port. Pin assumes a high impedance state upon reset.
P30~P31 (X1, X2)	Input	These pins are the main system clock inputs. The clock can be either a caramic or crystal resonator, and external logic signal may also be used as a clock source.
P32(V_{SS})		System ground
P33~P34 (XT_1~XT_2)	Input	These pins are the subsystem clock inputs. The clock can be either a ceramic or crystal resonator, an external logic signal may also be used as a clock source.
P35~P38 (P50~P53)	Input/ Output	These pin are used for input/output port 5 : this port has latched outputs and its outputs can directly drive an LED. Ports 4 and 5 can be paired together to function as one 8-bit port. A reset causeds this port to be in the input mode.
P39(RESET)	Input	This is the reset input, and it is active low
P40~P49 (T0~T9)	Output	These are high-voltage outputs used as FIP controller digit select timing signals. A reset signal sets these pins to the high-impedance state : if mask-option resistors are present the outputs go low.

Pin	I/O	Description
P50~P53 (T10~T13/ S15~S12/ PH3~PH0)	Output	Port H is a 4-bit output-only port, with P-channel opendrain outputs capable of directly driving LEDs. Alternatively, these pins can be used as high voltage digit/segment outputs. A reset signal causes this port to default to the high-impedance state : if mask-option resistors are present the output goes low.
P54~P55 (T14~T15/ S11~S10)	Output	These two pins provide additional digit select or segment lines. When not used for the display they can be used as static outputs.
P56(V_{LOAD})	Input	This pin is used to supply power to the output drivers for the segment lines and digit select, pins of the FIP Controller/driver
P57(V_{RPE})	Input	This is the power supply for the predrivers of the FIP Controller/ dirver
P1~P4 P58~P63 (S0~S9)	Output	These are high-voltage outputs used as FIP controller segment lines. Pull-down resistors can be selected as a mask-option. A reset signal sets these pins to the high impedance state :
P64(V_{DD})		The system positive power supply pin

TROUBLESHOOTING

Symptom	Cause and Remedy
Amplifier inoperative. (FL indicator does not light)	• Faulty AC power cord. Replace. • Defect in the power switch. Replace. • Broken wire in the power transformer. Replace the power transformer.
Not operating protection.	• Defective power tranformer. Replace. • Short in B+ (15 V) line. Repair the short circuit. • Protection circuit is defective (Q130 L/R, Q131 - Q135, Q137, Q140). Replace the component(s). • Poor contect in CNT504, CNT108. Retry connect. • CPU protection port damaged. Replace.
Fuse blows when power is turned on.	• Defective power transformer. Replace. • Short in the primary or secondary of the teansformer circuitry. Repair the short. • Damaged rectifier D115 - D118, D401 - D404. Replace the defective component(s). • Short circuit in the rectifier circuit. Repair the short.
Power indicator lights but no sound from both channels.	• Relay RLY102 defective. Replace the defective relay. • Defect in transistor Q111. Replace the defective transistor.
Center speaker inoperative.	• Center speaker relay RLY103 defective. Replace. • Defective in transistor Q139. Replace. • Defect in transistor Q404. Replace.
Rear speaker inoperative.	• Rear speaker relay RLY104 defective. Replace. • Defective in transistor Q141. Replace. • Defective in transistor Q405. Replace.
One channel dose not work when VOLUME at maximum.	• Break in copper foil of printed circuit board. Repair. • Short in output terminal. Repair or replace.
Speaker works normally but headphones inoperative.	• Headphone plug dose not mate with jack. Replace the plug. • Poor contact in CNT105. Retry connect.
PHONO input inoperative.	• Poor contact in phono jack. Repair or replace the jack. • Defective IC101. Replace.

Symptom	Cause and Remedy
LOUDNESS has no effect.	• Defective loudness switch. Replace. • Defective R601 L/R, R602 L/R, C601 L/R, C602 L/R. Replace the defective components.
BASS control has no effect.	• Variable resistor VR701 defective. Replace. • Defective R704, R706 - R708, R710, R711, C705 - C708, C712, C720. Replace the defective component(s).
TREBLE control has no effect.	• Variable resistor VR702 defective. Replace. • Defective R701, R702, R712, R716, C701 - C704. Replace the defective component(s).
FL inoperative.	• FL defective. Replace. • Defective IC501. Replace. • Defective REG501. Replace.
Noise in VOLUME control.	• Defective IC601. Replace. • Defective IC501. Replace. • Defective REG501. Replace.
Remote control unit inoperative.	• Weak battery. Replace. • Defective RMC sensor IR501. Replace.

MECHANICAL PARTS LIST

Ref. No.		Part No.	Description	Q'ty	Version
PACKAGE					
		9722030910	Cushion Poly		
		9715000510	Film Soft PE		
		9705001520	Poly Bag		
		049605196102	Box Carton		
ACCESSORIES					
		4328204520	Cord Digi-Link, Gold		
		4328207820	Cord RCA		
		5518001700	Battery AAA-1.5V		
CABINET					
1		046122022611	Cover Top	1	D
		046122022612	Cover Top, Gold	1	KS
2		6122632110	Frame Leef	1	
3		046033101611	Foot	2	
4		046033101611	Foot	2	
5		6505114910	Bracket Tone	1	
6	⚠	4448100410	AC Outlet	1	
	⚠	4448103610	AC Outlet	1	D
7		6122632210	Frame Right	1	
8		6122213110	Chassis Front	1	
9		6122418610	Cover Bottom	1	
10		048602018352	Panel Aluminum, Gold	1	KS
		048602018353	Panel Aluminum	1	D
11		048535033911	Badge	1	
12		8555031410	Indicator	1	
13		048521007951	Body Front, Gold	1	KS
		8521007910	Body Front	1	D
14		048545074351	Botton Power	1	KS
		8545074330	Botton Power	1	D
15		6555004380	Spring	1	
16		048545082151	Button Sleep, Gold	1	KS
		8545082110	Button Sleep	1	D
17		8555038710	Indicator	2	
18		048545089753	Button Speaker (C), Gold	1	D
		048545089751	Button Speaker (C), Gold	1	KS
19		048545089754	Button Speaker (R)	1	D
		048545089752	Button Speaker (R), Gold	1	KS
20		048543040851	Button Function, Gold	1	KS
		8543040810	Button Function	1	D
21		048555036416	Window Display, Gold	1	KS
		048555036412	Window Display	1	D
22		048545082621	Button Loudness	1	
23		6555002710	Spring	1	
24		048645010611	Knob Rotary, Gold	3	KS
		048645010612	Knob Rotary	3	D
25		048545089811	Button Tone	1	
26		9725002210	Spacer Felt	1	
27		6165142210	Shield Fence	1	
28		058643800120	Main Knob Ass'y, Gold	1	KS
		058643800110	Main Knob Ass'y	1	D
29		4408107710	Terminal Speaker 4P	1	
30		4408107810	Terminal Speaker 2P	1	
31		7505206120	Heatsink	2	
32		4438107410	Jack RCA 2P	1	
33		4438112910	Jack RCA 4P	1	
34		4438113010	Jack RCA 2P	1	
35		4438104210	Jack RCA 4P	3	
36		4438303910	Jack Digi Link	1	
37		7502006910	Heatsink Main	1	
38		6505113210	Bracket Heatsink L	1	
39		6505113310	Bracket Heatsink R	1	
40		6505103910	Bracket PCB	1	
41		6555801610	Spring Holder	1	
42		4438105910	Jack RCA 6P	3	
43		6528002810	Locking Tai	1	
44	⚠	4448103610	AC Outlet	1	
	⚠	4448105410	AC Outlet	1	D
45		6528300110	Fastner	2	
46		6705017610	Spacer PCB	2	
47		6705008320	Spacer LED	1	
48		6045008910	Holder LED	1	
49		4438005010	Jack Phone	1	
50		4438109710	Jack RCA 3P	1	
51		6165138210	Shield Fence	1	
52		4835021510	Cover LED	1	
53		046102035951	Chassis Back	1	D
		046102035911	Chassis Back, Gold	1	KS
54		4408104910	Terminal Ground	1	
55	⚠	4308008410	Cord AC Power	1	KS
	⚠	4408008310	Cord AC Power	1	D
56		6513000310	Cord Stopper	1	
57		4428300310	Adapter	1	
58		6515013810	Stopper PCB	2	D(Only)
59		3208049910	Volume Rotary	2	
60		4628058310	Switch Push	1	
61		3228019410	Volume Motor	1	
62		6163110710	Shield Fence Tone	1	
63		3208052010	Volume rotary	1	
64		6715015520	Sponge	1	
SW1		4658003710	Switch Tact	31	
SW2		4618006510	Switch Slide	1	KS
SW3		4618006610	Switch Slide	1	KS
		4002124700B	P.C.Board Main	1	
		4002124800C	P.C.Board Front	1	
		4002124900B	P.C.Board Input	1	
		4002124910B	P.C.Board Surround	1	
		4002124920B	P.C.Board Supply	1	
		4002124850C	P.C.Board Headphone	1	
		4002124860C	P.C.Board Volume LED	1	
		4002124810C	P.C.Board Volume	1	
		4002124840C	P.C.Board VCR Front	1	
		4002126900B	P.C.Board Outlet	1	
	⚠	2828009767	Power Transformer 220V 60Hz	1	KS(Only)
	⚠	2828000017	Power Transformer 110/220V 50/60Hz	1	KS
	⚠	2828000607	Power Transformer 230V 50Hz	1	D
S1		8109230083	Screw #2 BTC 3x8B	50	
S2		8109230101	Screw #2 BTC 3x10Y	4	
S3		8159230081	Screw #2 WPTC 3x8Y	16	
S4		8159440081	Screw WSAM 4x8Y	10	
S5		8119130103	Screw #1 PT 3x10B	26	
S6		8119240061	Screw #2 PTC 4x6Y	1	
S7		8129230083	Screw #2 FTC 3x8Y	2	
S8		8155000710	Screw Ground	2	
S9		8099130121	Screw HEX MSPW 3x12Y	2	
S10		8099130161	Screw HEX MSPW 3x16Y	2	

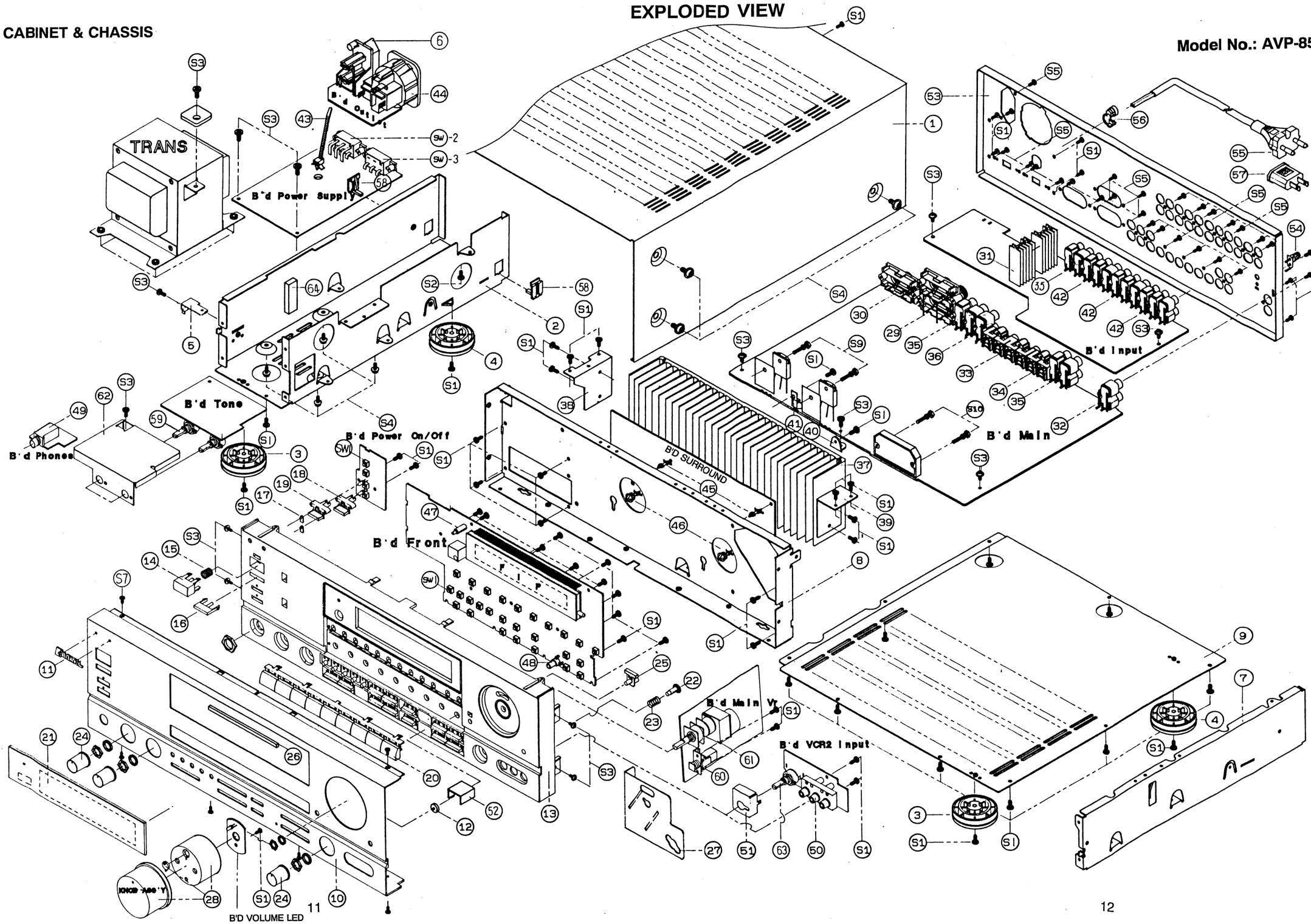
PRODUCT SAFETY NOTICE

Each precaution in this manual should be follower during servicing. Components identified with the IEC symbol ⚠ in the parts list and the safety can be of special significance. When replacing a component identified with ⚠ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CABINET & CHASSIS

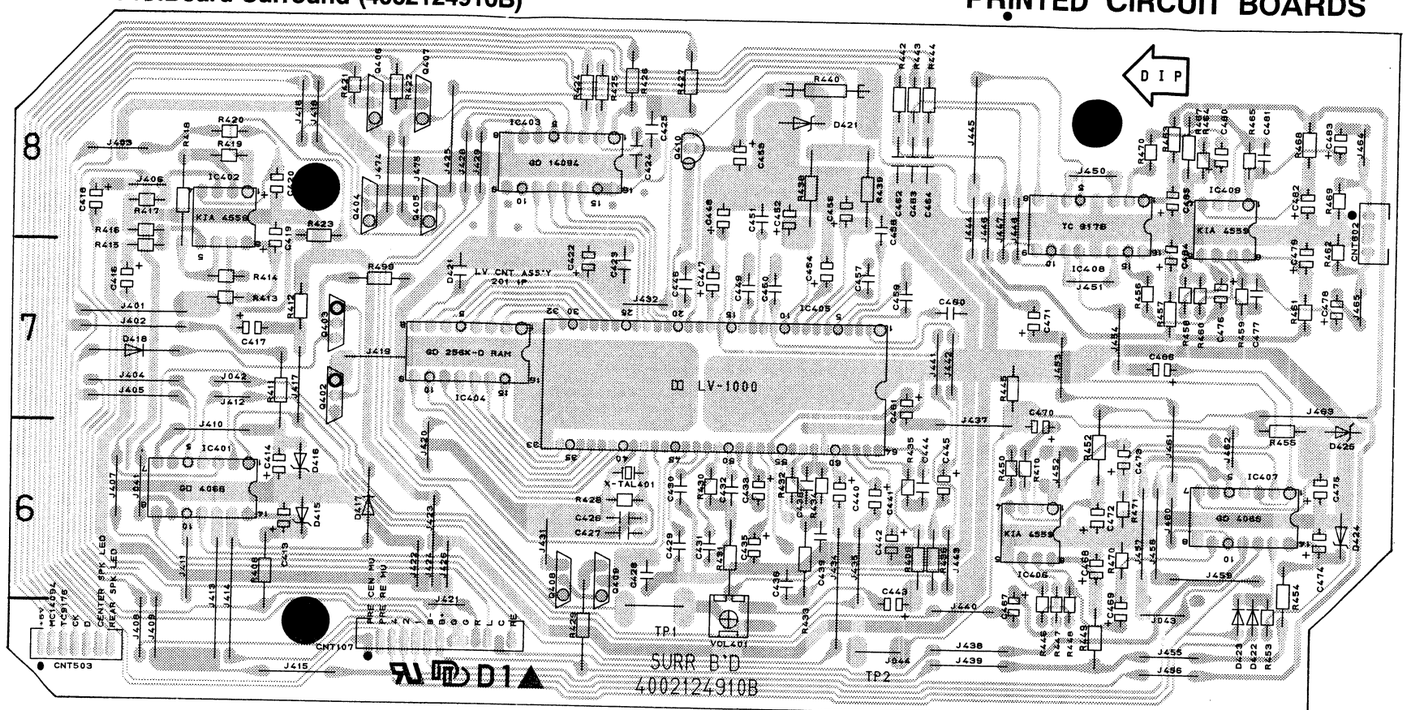
EXPLODED VIEW

Model No.: AVP-8500G/B

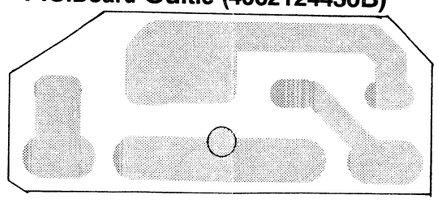


PRINTED CIRCUIT BOARDS

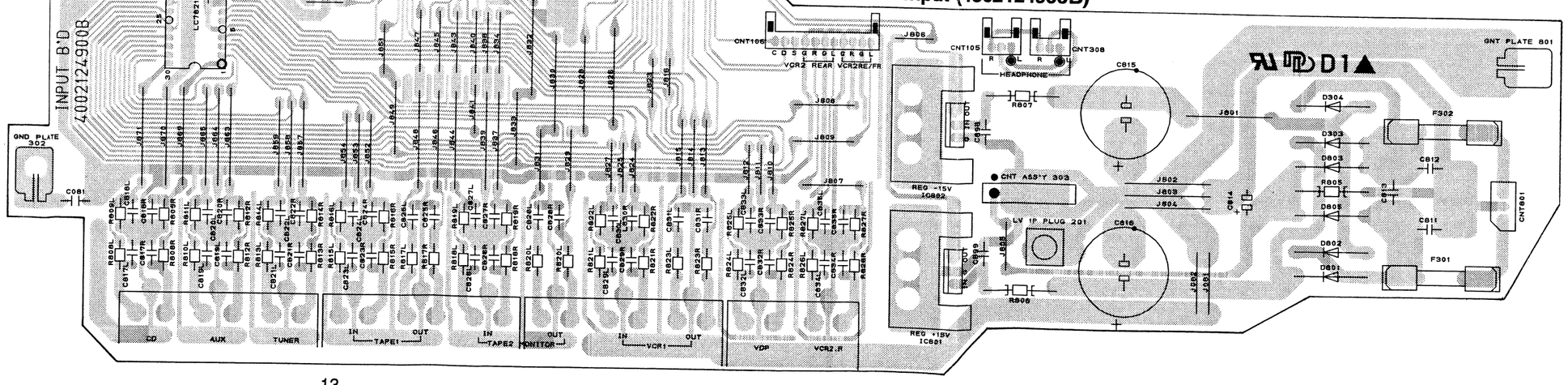
P.C.Board Surround (4002124910B)



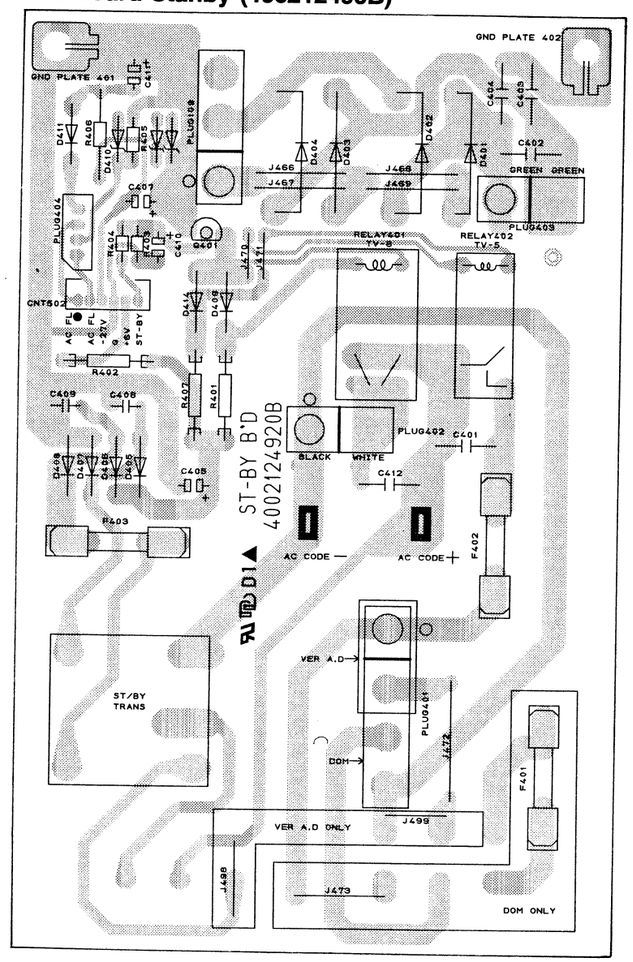
P.C.Board Outtle (4002124430B)



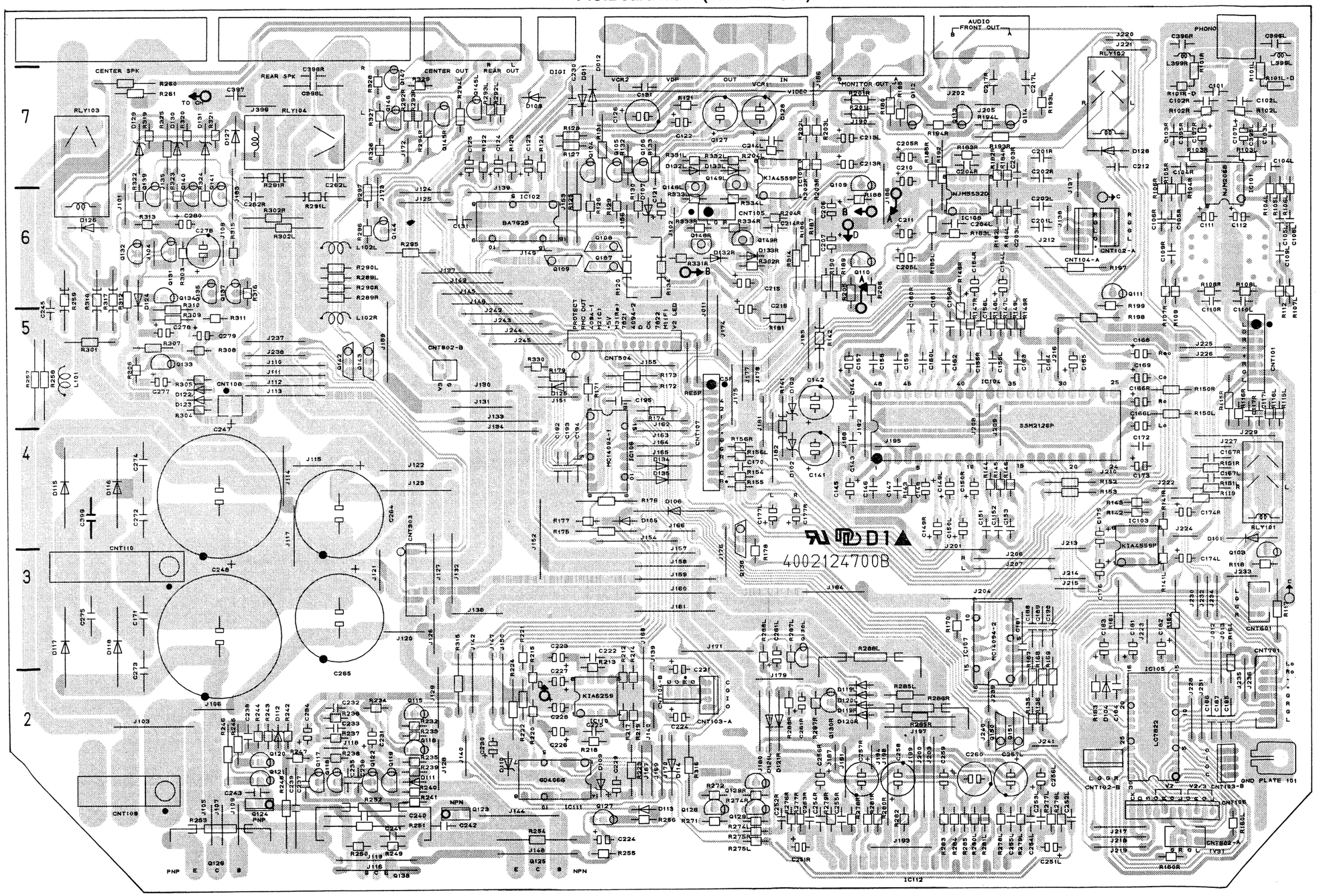
P.C.Board Input (4002124900B)



P.C.Board Stanby (400212490B)



P.C.Board Main (4002124700B)



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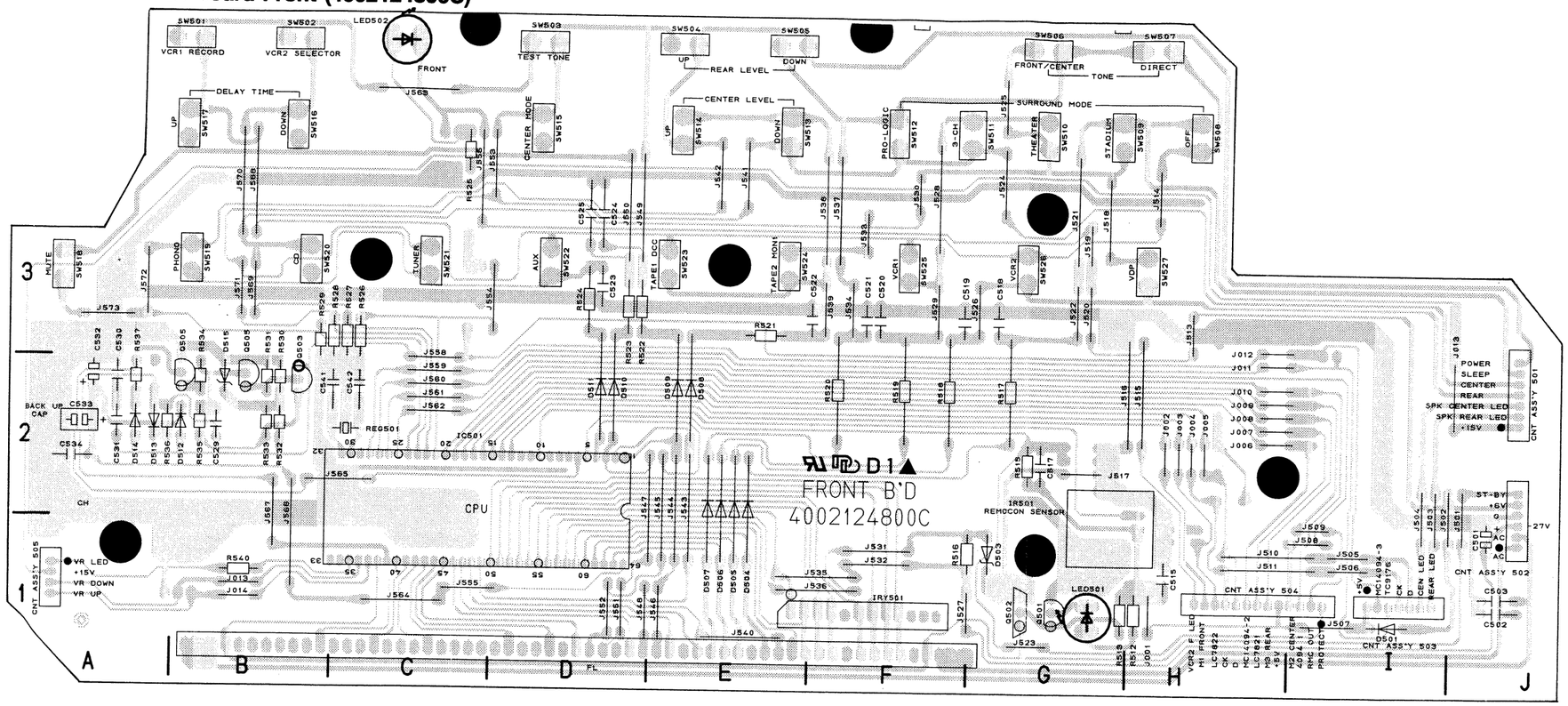
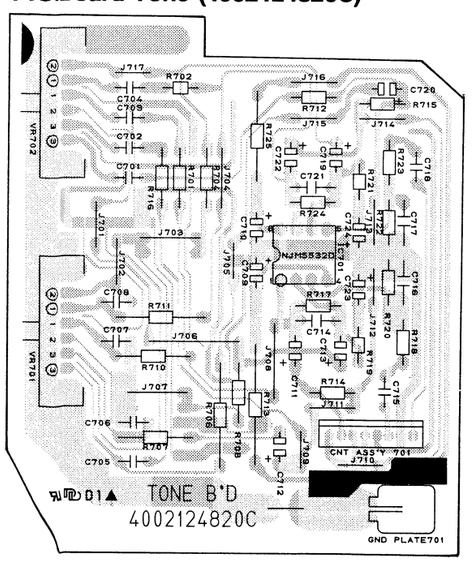
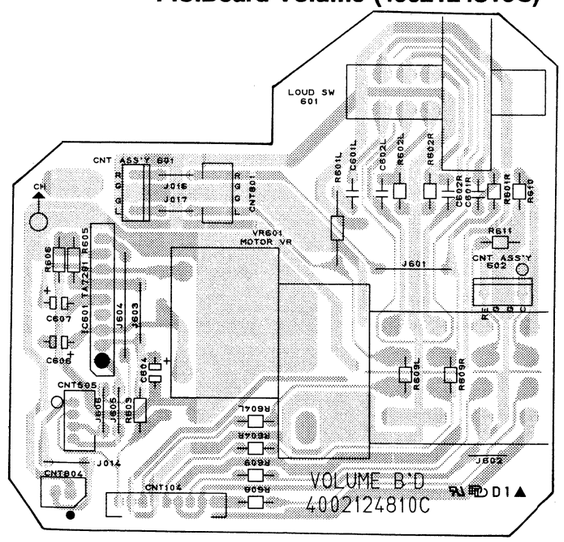
P.C.Board Front (4002124800C)



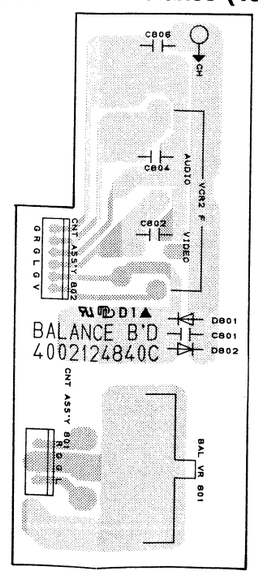
P.C.Board Tone (4002124820C)



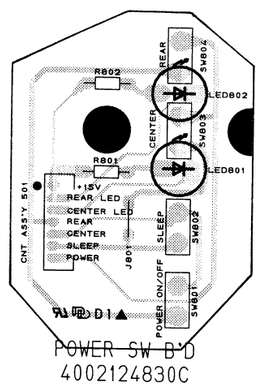
P.C.Board Volume (4002124810C)



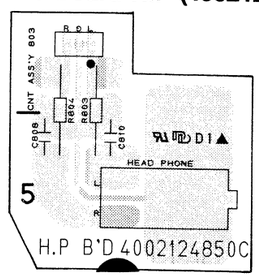
P.C.Board Balance (4002124840C)



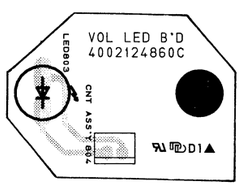
P.C.Board Power (4002124830C)



P.C.Board H.P (4002124850C)

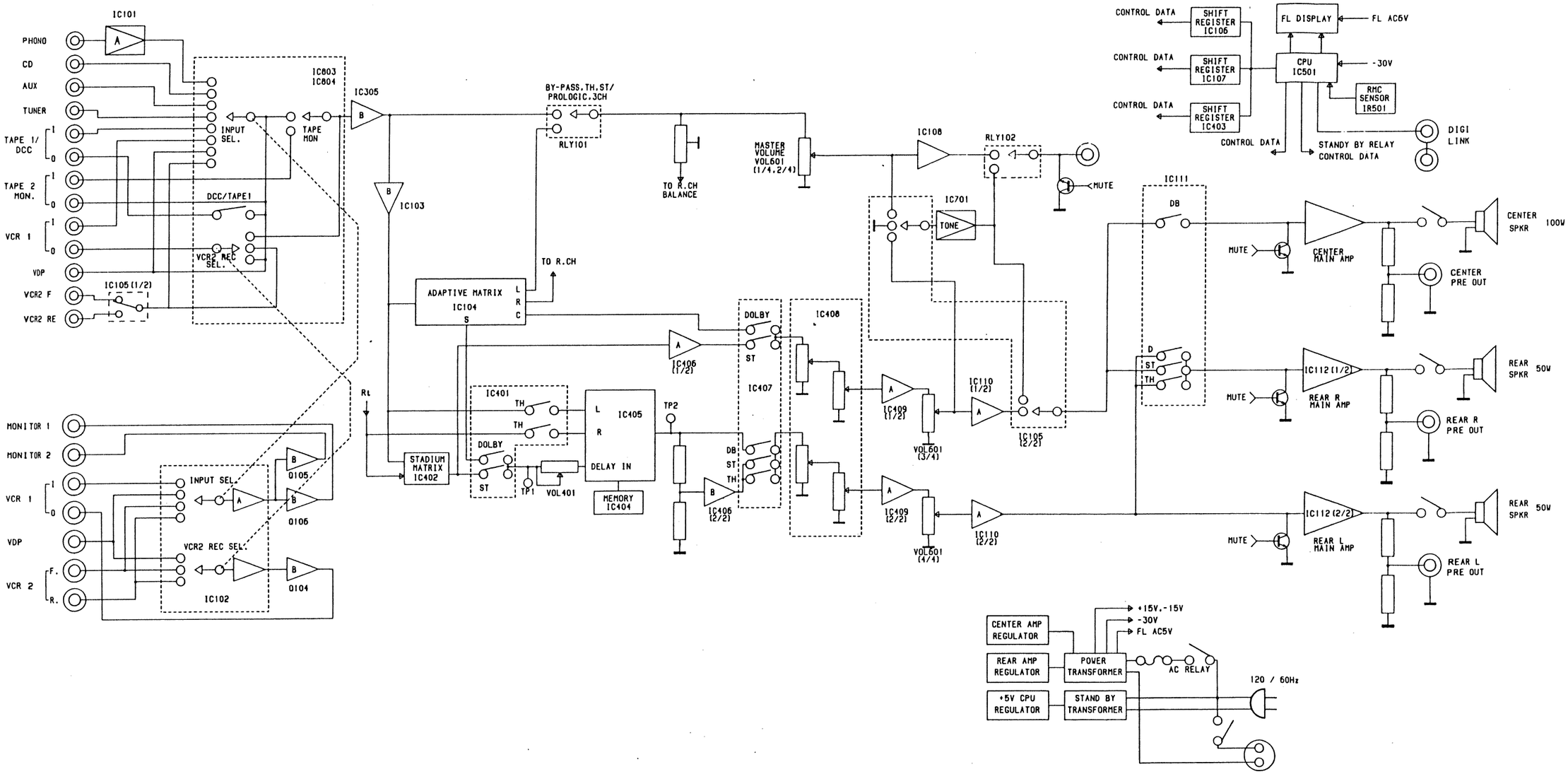


P.C.Board Vol. LED (4002124860C)



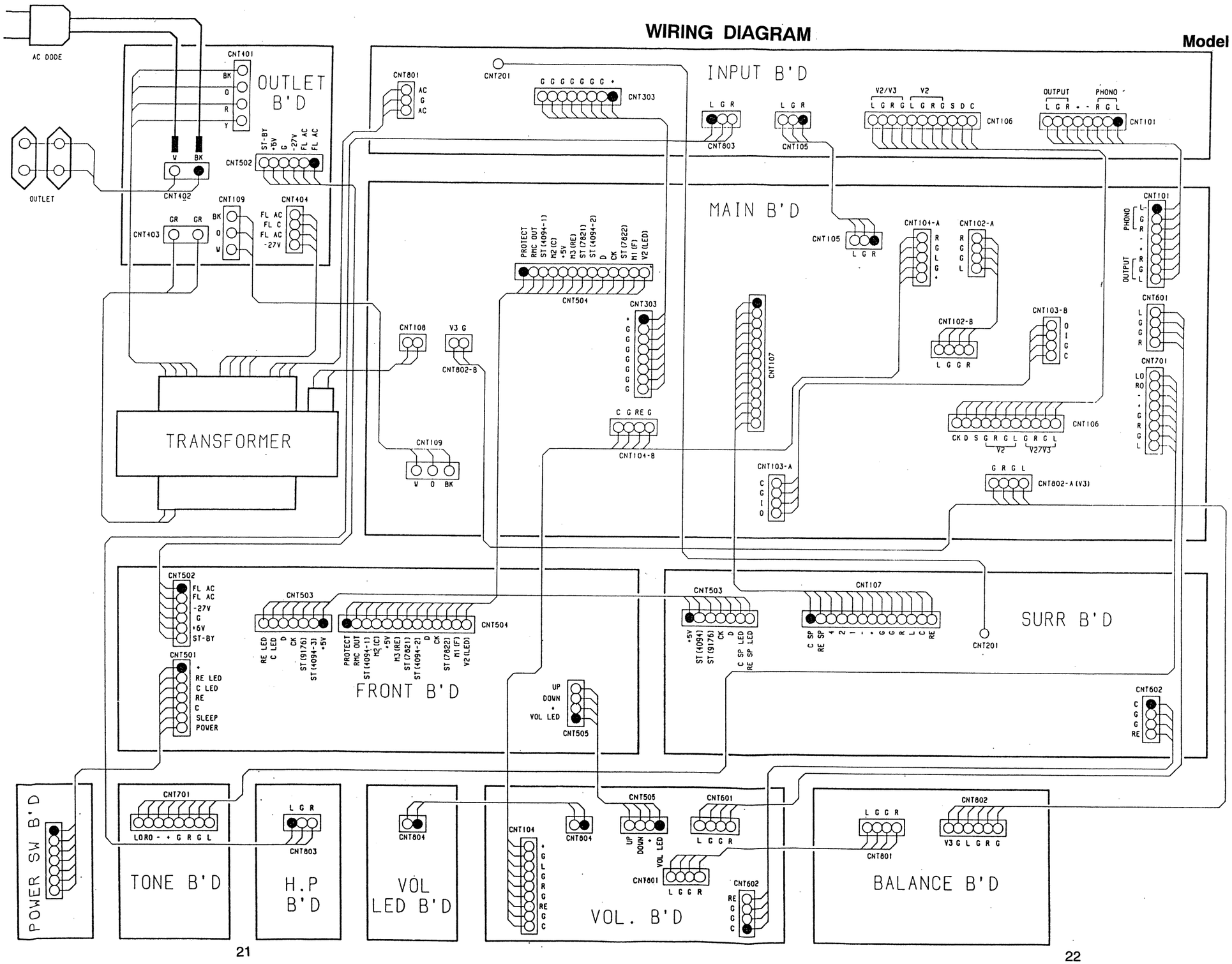
BLOCK DIAGRAM

Model No.: AVP-8500G/B



WIRING DIAGRAM

Model No.: AVP-8500G/B



ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTICE: Products marked with ⚠ have special characteristics important to safety.
If you replace of these components, read carefully the product safety notice in this manual.
Don't degrade the safety of the product through improper servicing.
Resistor/Capacitor Tolerance, D: (±0.5%), J: (±5%), K: (±10%), M: (±20%), Z: (+80, -20%)

Ref. No.	Part No.	Description				Q'ty	Version
	054020410056	**Ass.y P.C.Board Main**					**KS,D**
	4235007210	Terminal Ground				1	
	4855000111	Pipe Ceramic 12mm				8	
	152622101413	Wire, #22, Black, 140mm				1	
	152622102421	Wire, #22, Black, 240mm				1	
	152624021043	Wire, #24, Red, 100mm				1	
	152624100843	Wire, #24, Black, 80mm				1	
	052438000180	Ass'y Posistor , 180mm				1	
	2438012200	Posistor, PTH9M04BE222TS2F33				2	
	4855000111	Pipe Ceramic 12mm				8	
29	4408107710	Terminal Speaker 4P				1	
30	4408107810	Terminal Speaker 2P				1	
32	4438107410	Jack RCA 2P				1	
33	4438112910	Jack RCA 4P				1	
34	4438113010	Jack RCA 2P				1	
35	4438104210	Jack RCA 4P				2	
36	4438303910	Jack Digi Link				1	
C101	3519473935	Ceramic Tubular	0.047 µF	50V	Z	1	
C102 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C103 L/R	3679105297	Mylar	1 µF	63V	J	2	
C104 L/R	3519222935	Ceramic Tubular	2200 pF	50V	J	2	
C105 L/R	3679562120	Mylar	0.0056 µF	100V	J	2	
C106 L/R	3679182120	Mylar	0.0018 µF	100V	J	2	
C107 L/R	3479347041	Electrolytic SG	47 µF	25V	M	2	
C109 L/R	3679105297	Mylar	1 µF	63V	J	2	
C110 L/R	3679102120	Mylar	0.001 µF	100V	J	2	
C111 L/R	3479310131	Electrolytic SG	100 µF	16V	M	2	
C112	3479310131	Electrolytic SG	100 µF	16V	M	1	
C117 L/R	3519331935	Ceramic Tubular	330 µF	50V	J	2	
C121	3479310121	Electrolytic SG	100 µF	10V	M	1	
C122-C125	3479233041	Electrolytic SA	33 µF	25V	M	4	
C126-C128	3479347121	Electrolytic SG	470 µF	10V	M	3	
C131	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
C141/C142	3479347121	Electrolytic SG	470 µF	10V	M	2	
C143/C144	3679104297	Mylar	0.1 µF	63V	J	2	
C145	3479247971	Electrolytic SA	4.7 µF	50V	M	1	
C146/C147	3679224297	Mylar	0.22 µF	63V	J	2	
C148	3479210064	Electrolytic AH	10 µF	35V	M	1	
C149 L/R	3479210971	Electrolytic SA	1 µF	50V	M	2	
C150 L/R	3479210071	Electrolytic SA	10 µF	50V	M	2	
C151-C153	3679103120	Mylar	0.01 µF	100V	J	3	
C154 L/R	3479210871	Electrolytic SA	0.1 µF	50V	J	2	
C155 L/R	3679223120	Mylar	0.022 µF	100V	J	2	
C156 L/R	3519681935	Ceramic Tubular	680 µF	50V	J	2	
C157	3479247971	Electrolytic SA	4.7 µF	50V	M	1	
C158/C159	3679224297	Mylar	0.22 µF	63V	J	2	
C160 L/R	3679334297	Mylar	0.33 µF	63V	J	2	
C161/C162	3679334297	Mylar	0.33 µF	63V	J	2	
C163/C164	3679223120	Mylar	0.022 µF	100V	J	2	
C165	3679104297	Mylar	0.1 µF	63V	J	1	
C166 L/R	3479210071	Electrolytic SA	10 µF	50V	M	2	
C167 L/R	3519222935	Ceramic Tubular	2200 pF	50V	J	2	
C168	3479210971	Electrolytic SA	1 µF	50V	M	1	
C169	3479210071	Electrolytic SA	10 µF	50V	M	1	
C170	3679272120	Mylar	0.0027 µF	100V	J	1	
C172	3679104297	Mylar	0.1 µF	63V	J	1	
C173	3479310121	Electrolytic SG	100 µF	10V	M	1	

Ref. No.	Part No.	Description				Q'ty	Version
C174 L/R	3479222971	Electrolytic SA	2.2 µF	50V	M	2	
C175/C176	3479347041	Electrolytic SG	47 µF	25V	M	2	
C177 L/R	3479210071	Electrolytic SA	10 µF	50V	M	2	
C181/C182	3479347041	Electrolytic SG	47 µF	25V	M	2	
C183	3479210971	Electrolytic SA	1 µF	50V	M	1	
C184	3519103935	Ceramic Tubular	0.01 µF	50V	Z	1	
C185	3519222935	Ceramic Tubular	2200 pF	50V	J	1	
C186-C190	3519101935	Ceramic Tubular	100 pF	50V	J	5	
C192-C194	3519101935	Ceramic Tubular	100 pF	50V	J	3	
C195	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
C201 L/R	3679105297	Mylar	1 µF	63V	J	2	
C202 L/R	3679105297	Mylar	1 µF	63V	J	2	
C203 L/R	3519200935	Ceramic Tubular	20 pF	50V	J	2	
C204 L/R	3519560935	Ceramic Tubular	56 pF	50V	J	2	
C205 L/R	3479210071	Electrolytic SA	10 µF	50V	M	2	
C206/C207	3479347041	Electrolytic SG	47 µF	25V	M	2	
C210/C211	3479310131	Electrolytic SG	100 µF	16V	M	2	
C212	3679334297	Mylar	0.33 µF	63V	J	1	
C213 L/R	3479222971	Electrolytic SA	2.2 µF	50V	M	2	
C214 L/R	3519056935	Ceramic Tubular	5.6 pF	50V	J	2	
C215	3479347041	Electrolytic SG	47 µF	25V	M	1	
C216	3479347041	Electrolytic SG	47 µF	25V	M	1	
C217 L/R	3519391935	Ceramic Tubular	390 pF	50V	J	2	
C221	3479222971	Electrolytic SA	2.2 µF	50V	M	1	
C222	3519561935	Ceramic Tubular	560 pF	50V	J	1	
C223	3479210071	Electrolytic SA	10 µF	50V	M	1	
C224	3479222971	Electrolytic SA	2.2 µF	50V	M	1	
C225	3679152120	Mylar	0.0015 µF	100V	J	1	
C226	3479233971	Electrolytic SA	3.3 µF	50V	M	1	
C227/C228	3479347041	Electrolytic SG	47 µF	25V	M	2	
C229/C230	3479310121	Electrolytic SG	100 µF	10V	M	2	
C231	3479233971	Electrolytic	3.3 µF	50V	M	1	
C232	3679332120	Mylar	0.0033 µF	100V	J	1	
C233	3679122120	Mylar	0.0012 µF	100V	J	1	
C234	3479210071	Electrolytic SA	10 pFµF	50V	M	1	
C235	3519471935	Ceramic Tubular	470 pF	50V	J	1	
C236	3519200935	Ceramic Tubular	20 pF	50V	J	1	
C237	3519047935	Ceramic Tubular	4.7 pF	50V	J	1	
C238	3519473935	Ceramic Tubular	0.047 µF	50V	Z	1	
C239	3519082935	Ceramic Tubular	8.2 pF	50V	J	1	
C240	3519473935	Ceramic Tubular	0.047 µF	50V	Z	1	
C241	3519102935	Ceramic Tubular	1000 pF	50V	J	1	
C242/C243	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C245	3679473120	Mylar	0.047 µF	100V	J	1	
C247/C248	3419568245	Electrolytic HM	6800 µF	80V	M	2	
C251 L/R	3479233971	Electrolytic SA	3.3 µF	50V	M	2	
C252 L/R	3679682120	Mylar	0.0068 µF	100V	J	2	
C253 L/R	3679222120	Mylar	0.0022 µF	100V	J	2	
C254 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C255 L/R	3519056935	Ceramic Tubular	5.6 pF	50V	J	2	
C256 L/R	3479222971	Electrolytic SA	2.2 µF	50V	M	2	
C257 L/R	3479310171	Electrolytic SG	100 µF	50V	M	2	
C258	3479310171	Electrolytic SG	100 µF	50V	M	1	
C259	3479322071	Electrolytic SG	22 µF	50V	M	1	
C260	3479310171	Electrolytic SG	100 µF	50V	M	1	
C261 L/R	3479247971	Electrolytic SA	4.7 µF	50V	M	2	
C262 L/R	3679473120	Mylar	0.047 µF	100V	J	2	

Ref. No.	Part No.	Description	Q'ty	Version
C264/C265	3419547227	Electrolytic HM 4700 µF 50V M	2	
C271-C275	3519103450	Ceramic Disc 0.01 µF 500V Z	5	
C276	3479347121	Electrolytic SG 470 µF 10V M	1	
C277	3479210071	Electrolytic SA 10 µF 50V M	1	
C278	3479247971	Electrolytic SA 4.7 µF 50V M	1	
C279	3479322071	Electrolytic SG 22 µF 50V M	1	
CNT101	436208143332	Lead Ass'y 8P 140mm	1	
CNT102	435204188332	Lead Ass'y 4P 180mm	1	
CNT103	435204188732	Lead Ass'y 4P 180mm	1	
CNT104	435209358532	Lead Ass'y 9P 350mm	1	
CNT105	436203143332	Lead Ass'y 3P 140mm	1	
CNT106	435211248732	Lead Ass'y 11P 240mm	1	
CNT107	436213453332	Lead Ass'y 13P 450mm	1	
CNT108	4428516110	Wafer 2P	1	
CNT109	4428525800	Wafer AC 4P	1	
CNT110	4428525790	Wafer AC 3P	1	
CNT303	4428516710	Wafer 8P	1	
CNT504	4428517210	Wafer 13P	1	
CNT601	4428516310	Wafer 4P	1	
CNT701	4428516710	Wafer 8P	1	
CNT802A	4428516310	Wafer 4P	1	
CNT802B	4428516110	Wafer 2P	1	
D101	⚠ 2258100135	1N4002, Rectifier	1	
D102/D103	2258522112	Zener, 6.2V	2	
D104-D106	2058322101	1N4148M, Switching Diode	3	
D107/D108	2258522110	Zener, MTZ 5.1B	2	
D109	2258599130	Zener, UZ 7.5BSC	1	
D110	2258522108	Zener, MTZ 4.3V	1	
D111	2058322101	1N4148M, Switching Diode	1	
D112	2258522119	Zener, MTZ 12B	1	
D113/D114	2058322101	1N4148M, Switching Diode	2	
⚠ D115-D118	2058100136	1N5402, Rectifier	4	
D119 L/R	2058322101	1N4148M, Switching Diode	2	
D120 L/R	2058322101	1N4148M, Switching Diode	2	
D121 L/R	2058322101	1N4148M, Switching Diode	2	
D122	2258522119	Zener, MTZ 12B	1	
D124	⚠ 2258100135	1N4002, Rectifier	1	
D125	2058322101	1N4148M, Switching Diode	1	
D126-D128	2258100135	1N4002, Rectifier	3	
D129-D131	2258522116	Zener, MTZ 9.1B	3	
D132 L/R	2058322101	1N4148M, Switching Diode	2	
D133 L/R	2058322101	1N4148M, Switching Diode	2	
D134/D135	2058322101	1N4148M, Switching Diode	2	
IC101	2168020106	NJM2068DD, OP Amp	1	
IC102	2168027106	BA7625, Video Switching	1	
IC103	2168206104	KIA4559/KTA75559P, OP Amp	1	
IC104	2168000122	SSM2126	1	
IC105	2168017139	LC7822	1	
IC106/IC107	2138009115	MC14094BCP	2	
IC108	2168220135	NJM5532D	1	
IC109	2168206104	KIA4559/KTA75559P, OP Amp	1	
IC110	2168206107	KIA6259P, OP Amp	1	
IC111	2138009101	MC14066BCP	1	
IC112	2178317120	STK4192, Hbride IC	1	
L101	2648001010	Coil Inductor, 0.5uH	1	
L102 L/R	2648001010	Coil Inductor, 0.5uH	2	
Q103	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	1	
Q104-Q106	2208206105	KTA1015Y/BKTA1266, PNP, Silicon	3	
Q107	2208222105	DTA114Y, NPN, Silicon	1	
Q108	2208621106	DTC114YS, NPN	1	
Q109	2228406120	BKTC2235/KTC1027, NPN	1	
Q110	2228106107	BKTA965/KTA1023, PNP	1	
Q111	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	1	
Q112	2208206105	KTA1015Y/BKTA1266, PNP, Silicon	1	
Q113-Q116	2208606112	KTD1302, NPN, Silicon	4	

Ref. No.	Part No.	Description	Q'ty	Version
Q117/Q118	2208606108	KTC2240BL/BKTC3200, NPN	2	
Q119	2208206105	KTA1015Y/BKTA1266, PNP, Silicon	1	
Q120	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	1	
Q121	2208606107	KTC2229/KTC3206, NPN	1	
Q122	2208206102	BKTA949/KTA1024, PNP	1	
Q123	2028407118	2SC2168, NPN	1	
Q124	2028107115	2SA958, PNP	1	
Q125	2028416106	2SC3855, NPN, Power Transistor	1	
Q126	2028116103	2SA1491, PNP, Power Transistor	1	
Q127	208606104	KTC1815Y/BKTC3198, NPN, Silicon	1	
Q128	2208206105	KTA1015Y/BKTA1266, PNP, Silicon	1	
Q129 L/R	2208606112	KTD1302, NPN, Silicon	2	
Q130 L/R	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	2	
Q131/Q132	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	2	
Q134	2208206105	KTA1015Y/BKTA1266, PNP, Silicon	1	
Q135	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	1	
Q136	2208621106	DTC114YS, NPN	1	
Q137	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	1	
Q138	2008622110	2SC4137, NPN, Bias	1	
Q139-Q141	2208606104	KTC1815Y/BKTC3198, NPN, Silicon	3	
Q142/Q143	2208621106	DTC114YS, NPN	2	
Q144	2208206105	KTA1015Y/BKTA1266, PNP, Silicon	1	
Q145 L/R	2208606112	KTD1302, NPN, Silicon	2	
Q146	2208206105	KTA1015Y/BKTA1266, PNP, Silicon	1	
Q147	2208606112	KTD1302, NPN, Silicon	1	
Q148 L/R	2208606114	MPSA06, NPN, Silicon	2	
Q149 L/R	2208206113	MPSA56, PNP, Silicon	2	
Q150/Q151	2208621106	DTC114YS, NPN	2	
R101 L/R	3069102970	Carbon Film 1 kohm 1/5W J	2	
R102 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R103 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R104 L/R	3069564970	Carbon Film 560 kohm 1/5W J	2	
R105 L/R	3069433970	Carbon Film 43 kohm 1/5W J	2	
R106 L/R	3069821970	Carbon Film 820 ohm 1/5W J	2	
R107 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R108 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R109	3069101970	Carbon Film 100 ohm 1/5W J	1	
R112	3069101970	Carbon Film 100 ohm 1/5W J	1	
R115 L/R	3069102970	Carbon Film 1 kohm 1/5W J	2	
R116 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R117/R118	3069103970	Carbon Film 10 kohm 1/5W J	2	
R119	3069151970	Carbon Film 150 ohm 1/5W J	1	
R120	3029221472	Metal Film 220 ohm 1W J	1	
R121-R124	3069750970	Carbon Film 75 ohm 1/5W J	4	
R125	3069101970	Carbon Film 100 ohm 1/5W J	1	
R126	3069151970	Carbon Film 150 ohm 1/5W J	1	
R127/R128	3069101970	Carbon Film 100 ohm 1/5W J	2	
R129/R130	3069151970	Carbon Film 150 ohm 1/5W J	2	
R131-R133	3069750970	Carbon Film 75 ohm 1/5W J	3	
R134	3029221472	Metal Film 220 ohm 1 W J	1	
R135/R136	3069102970	Carbon Film 1 kohm 1/5W J	2	
R141	3029181472	Metal Film 180 ohm 1 W J	1	
R141 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R142/R143	3069221970	Carbon Film 220 ohm 1/5W J	2	
R144-R146	3069223970	Carbon Film 22 kohm 1/5W J	3	
R147 L/R	3069752970	Carbon Film 7.5 kohm 1/5W J	2	
R148 L/R	3069473970	Carbon Film 47 kohm 1/5W J	2	
R149 L/R	3069153970	Carbon Film 15 kohm 1/5W J	2	
R150 L/R	3069391970	Carbon Film 390 ohm 1/5W J	2	
R151 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R152	3069391970	Carbon Film 390 ohm 1/5W J	1	
R154/R155	3069104970	Carbon Film 100 kohm 1/5W J	2	
R156 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R160 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R161/R162	3069221970	Carbon Film 220 ohm 1/5W J	2	

Ref. No.	Part No.	Description				Q'ty	Version
R163	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R164-R169	3069102970	Carbon Film	1 kohm	1/5W	J	6	
R170	3069100970	Carbon Film	10 ohm	1/5W	J	1	
R171-R173	3069102970	Carbon Film	kohm	1/5W	J	3	
R174	3069100970	Carbon Film	10 ohm	1/5W	J	1	
R175-R177	3069104970	Carbon Film	100 kohm	1/5W	J	3	
R178	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R179	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R180	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R182 L/R	3069333970	Carbon Film	33 kohm	1/5W	J	2	
R183 L/R	3069622970	Carbon Film	6.2 kohm	1/5W	J	2	
R184 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R185 L/R	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R186	3069100970	Carbon Film	10 ohm	1/5W	J	1	
R187	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R188	3069270970	Carbon Film	27 ohm	1/5W	J	1	
R189	3069100970	Carbon Film	10 ohm	1/5W	J	1	
R190	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R191	3069270970	Carbon Film	27 ohm	1/5W	J	1	
R192	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R193 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R194 L/R	3069102970	CCarbon Film	1 kohm	1/5W	J	2	
R195	3069333970	Carbon Film	33 kohm	1/5W	J	1	
R197	3069151970	Carbon Film	150 ohm	1/5W	J	1	
R198/R199	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R201 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R202 L/R	3069104970	Carbon Film	100 kohm	1/5W	J	2	
R203 L/R	3069392970	Carbon Film	3.9 kohm	1/5W	J	2	
R204 L/R	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R205/R206	3069471970	Carbon Film	470 ohm	1/5W	J	2	
R212	3069333970	Carbon Film	33 kohm	1/5W	J	1	
R213	3069512970	Carbon Film	5.1 kohm	1/5W	J	1	
R214	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R215	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R217	3069333970	Carbon Film	33 kohm	1/5W	J	1	
R218	3069432970	Carbon Film	4.3 kohm	1/5W	J	1	
R219/R220	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R221/R222	3069221970	Carbon Film	220 ohm	1/5W	J	2	
R223	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R224	3069821970	Carbon Film	820 ohm	1/5W	J	1	
R232	3069333970	Carbon Film	33 kohm	1/5W	J	1	
R233	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R234	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R235	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R236	3069272970	Carbon Film	2.7 kohm	1/5W	J	1	
R237	3069273970	Carbon Film	27 kohm	1/5W	J	1	
R238	3069681970	Carbon Film	680 ohm	1/5W	J	1	
R239/R240	3069221970	Carbon Film	220 ohm	1/5W	J	2	
R241	3069680970	Carbon Film	68 ohm	1/5W	J	1	
R242/R243	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R244	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R245	3069221970	Carbon Film	220 ohm	1/5W	J	1	
R246	3069680970	Carbon Film	68 ohm	1/5W	J	1	
R247	3069821970	Carbon Film	820 ohm	1/5W	J	1	
R248	3069273970	Carbon Film	27 kohm	1/5W	J	1	
R249	3069242970	Carbon Film	2.4 kohm	1/5W	J	1	
R250	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R251	3069221970	Carbon Film	220 ohm	1/5W	J	1	
R252/R253	3059278782	Cement	0.27 ohm	5W	J	2	
R254	3069222970	Carbon Film	2.2 kohm	1/5W	J	1	
R255	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R256	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R257/R258	3069100970	Carbon Film	10 ohm	1/5W	J	2	
R259	3029100472	Metal Film	10 ohm	1W	J	1	
R260	3069273970	Carbon Film	27 kohm	1/5W	J	1	
R261	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R271	3069333970	Carbon Film	33 kohm	1/5W	J	1	
R272	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R274 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R275 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R276 L/R	3069272970	Carbon Film	2.7 kohm	1/5W	J	2	
R277 L/R	3069273970	Carbon Film	27 kohm	1/5W	J	2	
R278 L/R	3069273970	Carbon Film	27 kohm	1/5W	J	2	
R279 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R280 L/R	3069472970	Carbon Film	4.7 kohm	1/5W	J	2	
R281 L/R	3069242970	Carbon Film	2.4 kohm	1/5W	J	2	
R282	3069101970	Carbon Film	100 ohm	1/5W	J	1	
R283	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R284	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R285 L/R	3069122970	Carbon Film	1.2 kohm	1/5W	J	2	
R286 L/R	3059278782	Cement	0.27 ohm	5W	J	2	
R287 L/R	3069472970	Carbon Film	4.7 kohm	1/5W	J	2	
R288 L/R	3069153970	Carbon Film	15 kohm	1/5W	J	2	
R289 L/R	3069100970	Carbon Film	10 ohm	1/5W	J	2	
R290 L/R	3069100970	Carbon Film	10 ohm	1/5W	J	2	
R291 L/R	3029100472	Metal Film	10 ohm	1W	J	2	
R292 L/R	3069223970	Carbon Film	22 kohm	1/5W	J	2	
R293 L/R	3069122970	Carbon Film	1.2 kohm	1/5W	J	2	
R294 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R295	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R296	3069333970	Carbon Film	33 kohm	1/5W	J	1	
R297	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R301	3069123970	Carbon Film	12 kohm	1/5W	J	1	
R302 L/R	3069822970	Carbon Film	8.2 kohm	1/5W	J	2	
R303	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R304	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R305/R306	3069473970	Carbon Film	47 kohm	1/5W	J	2	
R307/R308	3069223970	Carbon Film	22 kohm	1/5W	J	2	
R309	3069101970	Carbon Film	100 ohm	1/5W	J	1	
R310	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R311	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R312	3069183970	Carbon Film	18 kohm	1/5W	J	1	
R313	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R315	3069473970	Carbon Film	47 kohm	1/5W	J	1	
R316	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R317/R318	3029100472	Metal Film	10 ohm	1W	J	2	
R319-R321	3069103970	Carbon Film	10 kohm	1/5W	J	3	
R322-R324	3069473970	Carbon Film	47 kohm	1/5W	J	3	
R325	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R326	3069202970	Carbon Film	2 kohm	1/5W	J	1	
R327	3069333970	Carbon Film	33 kohm	1/5W	J	1	
R328	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R329	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R330	3069224970	Carbon Film	220 kohm	1/5W	J	1	
R331 L/R	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R332 L/R	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R333 L/R	3069100970	Carbon Film	10 ohm	1/5W	J	2	
R334 L/R	3069100970	Carbon Film	10 ohm	1/5W	J	2	
RLY101/102	528001020	Relay, RY 12V				2	
RLY103/104	5528001610	Relay, OSA-SS-224 DM3				2	
	054020410057	**Ass'y P.C.Board Surround**					P,T,INDO,KS,D
C413/C414	3479347041	Electrolytic SG	47 µF	25V	M	2	
C416	3479247971	Electrolytic SA	4.7 µF	50V	M	1	
C417	3479233971	Electrolytic SA	3.3 µF	50V	M	1	
C418	3479247971	Electrolytic SA	4.7 µF	50V	M	1	
C419/C420	3479347041	Electrolytic SG	47 µF	25V	M	2	
C421	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
C422	3479322131	Electrolytic SG	220 µF	16V	M	1	
C423	3479347041	Electrolytic SG	47 µF	25V	M	1	

Ref. No.	Part No.	Description				Q'ty	Version
C424/C425	3519104935	Ceramic Tubular	0.1 µF	50V	Z	2	
C426/C427	3519270935	Ceramic Tubular	27 pF	50V	J	2	
C428	3679224297	Mylar	0.22 µF	63V	J	1	
C429	3679682120	Mylar	0.0068 µF	100V	J	1	
C430	3679392120	Mylar	0.0039 µF	100V	J	1	
C431	3679472120	Mylar	0.0047 µF	100V	J	1	
C432	3679333120	Mylar	0.033 µF	100V	J	1	
C433	3479210071	Electrolytic SA	10 µF	50V	M	1	
C435	3679105297	Mylar	1 µF	63V	J	1	
C436	3679562120	Mylar	0.0056 µF	100V	J	1	
C438	3519471935	Ceramic Tubular	470 pF	50V	J	1	
C439	3679472120	Mylar	0.0047 µF	100V	J	1	
C440-C443	3479210071	Electrolytic SA	10 µF	50V	M	4	
C444	3519681935	Ceramic Tubular	680 pF	50V	J	1	
C445	3479210071	Electrolytic SA	10 µF	50V	M	1	
C446	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
C447/C448	3479322131	Electrolytic SG	220 µF	16V	M	2	
C449	3619151110	Poly	150 pF	50V	J	1	
C450	3619681110	Poly	680 pF	50V	J	1	
C451	3679223120	Mylar	0.022 µF	100V	J	1	
C452	3479210971	Electrolytic SA	1 µF	50V	M	1	
C453	3479322131	Electrolytic SG	220 µF	16V	M	1	
C454	3479347121	Electrolytic SG	470 µF	10V	M	1	
C456	3479210971	Electrolytic SA	1 µF	50V	M	1	
C457	3619681110	Poly	680 pF	50V	J	1	
C458	3679223120	Mylay	0.022 µF	100V	J	1	
C459	3619151110	Poly	150 pF	50V	J	1	
C460	3679154297	Mylar	0.15 µF	63V	J	1	
C461	3479210071	Electrolytic SA	10 µF	50V	M	1	
C462/C463	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C464	3519222935	Ceramic Tubular	2200 pF	50V	J	1	
C467	3479210071	Electrolytic SA	10 µF	50V	M	1	
C468	3479347041	Electrolytic SG	47 µF	25V	M	1	
C469	3479233971	Electrolytic SA	3.3 µF	50V	M	1	
C470	3479210071	Electrolytic SA	10 µF	50V	M	1	
C471	3479322071	Electrolytic SG	22 µF	50V	M	1	
C473	3479233971	Electrolytic SA	3.3 µF	50V	M	1	
C474/C475	3479347041	Electrolytic SG	47 µF	25V	M	2	
C476	3479222971	Electrolytic SA	2.2 µF	50V	M	1	
C477	3679102120	Mylar	0.001 µF	100V	J	1	
C478	3479210071	Electrolytic SA	10 µF	50V	M	1	
C479	3479347041	Electrolytic SG	47 µF	25V	M	1	
C480	3479222971	Electrolytic SA	2.2 µF	50V	M	1	
C481	3519821935	Ceramic Tubular	820 µF	5V	J	1	
C482	3479347041	Electrolytic SG	47 µF	25V	M	1	
C483	3479210071	Electrolytic SA	10 µF	50V	M	1	
C484/C485	3479347041	Electrolytic SG	47 µF	25V	M	2	
C486	3479322071	Electrolytic SG	22 µF	50V	M	1	
CNT107	4428517210	Wafer 13P				1	
CNT201	4359824042	Lead Ass'y 1P 420mm				1	
CNT503	4428516610	Wafer 7P				1	
CNT602	4428516310	Wafer 4P				1	
D415	2258599130	Zener, UZ 7.5BSC				1	
D417/D418	2058322101	1N4148M, Switching Diode				2	
D421	2258522119	Zener, MTZ 12B				1	
D422/D423	2058322101	1N4148M, Switching Diode				2	
D424	2258599130	Zener, UZ 7.5BSC				1	
D425	5558522108	Zener, 4.3V				1	
IC401	2138009101	MC14066BCP				1	
IC402	2168206104	KIA4559/KTA75559P, OP Amp				1	
IC403	2138009115	MC14094BCP				1	
IC404	2138430001	UD61256-08, DRAM				1	
IC405	2168017142	LV1000NA				1	
IC406	2168206104	KIA4559/KTA75559P, OP Amp				1	
IC407	2138009101	MC14066BCP				1	

Ref. No.	Part No.	Description				Q'ty	Version
IC408	2138007124	TC9176P				1	
IC409	2168206104	KIA4559/KTA75559P, OP Amp				1	
Q401	2208606114	MPSA06, NPN				1	
Q402/Q403	2208621106	DTC114YS, NPN				2	
Q404/Q405	2208222105	DTA114Y, NPN, Silicon				2	
Q406-Q408	2208621106	DTC114YS, NPN				3	
Q409	2208222105	DTA114Y, NPN, Silicon				1	
Q410	2208606104	KTC1815Y/BKTC3198, NPN, Silicon				1	
R401	3029100472	Metal Film	10 ohm	1W	J	1	
R402	3029330572	Metal Film	33 ohm	2W	J	1	
R403	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R404	3069202970	Carbon Film	2 kohm	1/5W	J	1	
R405	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R406	3069331970	Carbon Film	330 ohm	1/5W	J	1	
R407	3029100472	Metal Film	10 ohm	1W	J	1	
R408	3069561970	Carbon Film	560 ohm	1/5W	J	1	
R409	3069392970	Carbon Film	3.9 kohm	1/5W	J	1	
R410	3069562970	Carbon Film	5.6 kohm	1/5W	J	1	
R411	3069821970	Carbon Film	820 ohm	1/5W	J	1	
R412	3069272970	Carbon Film	2.7 kohm	1/5W	J	1	
R413	3069101970	Carbon Film	100 ohm	1/5W	J	1	
R414	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R415/R416	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R417-R419	3069223970	Carbon Film	22 kohm	1/5W	J	3	
R420	3069101970	Carbon Film	100 ohm	1/5W	J	1	
R421/R422	3069331970	Carbon Film	330 ohm	1/5W	J	2	
R423	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R424-R426	3069102970	Carbon Film	1 kohm	1/5W	J	3	
R427	3069100970	Carbon Film	10 ohm	1/5W	J	1	
R429	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R430	3069473970	Carbon Film	47 kohm	1/5W	J	1	
R431	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R432	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R433/R434	3069822970	Carbon Film	8.2 kohm	1/5W	J	2	
R435	3069393970	Carbon Film	39 kohm	1/5W	J	1	
R436	3069822970	Carbon Film	8.2 kohm	1/5W	J	1	
R438/R439	3069224970	Carbon Film	220 kohm	1/5W	J	2	
R440	3029560472	Metal Film	56 ohm	1W	J	1	
R442-R444	3069102970	Carbon Film	1 kohm	1/5W	J		
R445/R446	3069104970	Carbon Film	100 kohm	1/5W	J	2	
R447	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R448	3069512970	Carbon Film	5.1 kohm	1/5W	J	1	
R449	3069101970	Carbon Film	100 ohm	1/5W	J	1	
R450	3069123970	Carbon Film	12 kohm	1/5W	J	1	
R452	3069101970	Carbon Film	100 ohm	1/5W	J	1	
R453	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R454	3069561970	Carbon Film	560 ohm	1/5W	J	1	
R455	3069821970	Carbon Film	820 ohm	1/5W	J	1	
R456	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R457	3069221970	Carbon Film	220 ohm	1/5W	J	1	
R459	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R460	3069202970	Carbon Film	2 kohm	1/5W	J	1	
R461	3069470970	Carbon Film	47 ohm	1/5W	J	1	
R462	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R463	3069221970	Carbon Film	220 ohm	1/5W	J	1	
R464	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R465	3069362970	Carbon Film	3.6 kohm	1/5W	J	1	
R467	3069182970	Carbon Film	1.8 kohm	1/5W	J	1	
R468	3069470970	Carbon Film	47 ohm	1/5W	J	1	
R469	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R470/R471	3069202970	Carbon Film	2 kohm	1/5W	J	2	
VOL401	3248010353	Semi Fixed Resistor, 10 kohm				1	
X-TAL401	3908111400	Resonator, 8MHz				1	

Ref. No.	Part No.	Description				Q'ty	Version
	054020410058	**Ass'y P.C.Board Front**					P,T,INDO,KS,D
47	6705008320	Spacer LED				1	
48	6045008910	Holder LED				1	
SW1	4658003710	Switch Tact				27	
C501	3479322071	Electrolytic SG	22 µF	50V	M	1	
C502/C503	3519473935	Ceramic Tubular	0.047 µF	50V	Z	2	
C505	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
C517	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
C518-C523	3519101935	Ceramic Tubular	100 pF	50V	J	6	
C529	3679103120	Mylar	0.01 µF	100V	J	1	
C530/C531	3519102935	Ceramic Tubular	0.001 µF	50V	J	2	
C532	3479310121	Electrolytic SG	100 µF	10V	M	1	
C533	3449347314	Capacitor Super	0.047 µF	5.5V	M	1	
C534	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
CNT501	436207103332	Lead Ass'y 7P 100mm				1	
CNT502	436206403332	Lead Ass'y 6P 400mm				1	
CNT503	436207143332	Lead Ass'y 7P 140mm				1	
CNT504	436213503332	Lead Ass'y 13P 500mm				1	
CNT505	436204143332	Lead Ass'y 4P 140mm				1	
D501	2258100135	1N4002, Rectifier				1	
D503	2258522116	Zener, MTZ 9.1B				1	
D504-D514	2058322101	1N4148M, Switching Diode				11	
D515	2258522110	Zener, MTZ 5.1B				1	
D516	2258522108	Zener, MTZ 4.3V				1	
IC501	2138313207	UPD75212ACW-A81				1	
IR501	2408000131	Sensor Remote, KRK-34LI				1	
IRY501	3088124161	Net Work RGLN11x124G, 120 k				1	
FL	2128130301	FIP, 12 LM 8				1	
LED501	2371124701	LED, SLR-34URCF25, Stand-by				1	
LED502	2371124701	LED, SLR-34URCF25, VCR2 Front/Rear				1	
Q501	2208606104	KTC1815Y/BKTC3198, NPN, Silicon				1	
Q502	2208621106	DTC114YS, NPN				1	
Q503	2028106106	KTA817A/KTA1274, PNP				1	
Q505	2208606104	KTC1815Y/BKTC3198, NPN, Silicon				1	
R512	3069391970	Carbon Film	390 ohm	1/5W	J	1	
R513	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R515	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R516	3069682970	Carbon Film	6.8 kohm	1/5W	J	1	
R517-R524	3069102970	Carbon Film	1 kohm	1/5W	J	8	
R525	3069132970	Carbon Film	1.3 kohm	1/5W	J	1	
R526-R529	3069123970	Carbon Film	12 kohm	1/5W	J	4	
R530	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R531	3069391970	Carbon Film	390 ohm	1/5W	J	1	
R532	3069390970	Carbon Film	39 ohm	1/5W	J	1	
R533	3069391970	Carbon Film	390 ohm	1/5W	J	1	
R534	3069473970	Carbon Film	47 kohm	1/5W	J	1	
R535	3069562970	Carbon Film	5.6 kohm	1/5W	J	1	
R536	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R537	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R540	3069221970	Carbon Film	220 ohm	1/5W	J	1	
REG501	3938131460	Gesonator, CSA 4.19MHz				1	
	054020410059	**Ass'y P.C.Board Volume**					P,T,INDO,KS,D
60	4628058310	Switch Push				1	
61	3228019410	Volume Motor				1	
C601 L/R	5194719351	Ceramic Tubular	470 pF	50V	J	2	
C602 L/R	3679823120	Mylar	0.082 µF	100V	J	2	
C604	3479347041	Electrolytic SG	47 µF	25V	M	1	
C606/C607	3479310121	Electrolytic SG	100 µF	10V	M	2	
CNT104	4428516810	Wafer 9P				1	
CNT505	4428516310	Wafer 4P				1	
CNT601	436204228332	Leaqd Ass'y 4P 220mm				1	
CNT602	436204163132	Leaqd Ass'y 4P 160mm				1	
CNT801	4428516310	Wafer 4P				1	
CNT804	4428508210	Wafer 2P				1	

Ref. No.	Part No.	Description				Q'ty	Version
IC601	2168007204	TA7291S				1	
R601 L/R	3069513970	Carbon Film	51 kohm	1/5W	J	2	
R602 L/R	3069622970	Carbon Film	6.2 kohm	1/5W	J	2	
R603	3069470970	Carbon Film	47 ohm	1/5W	J	1	
R604 L/R	3069152970	Carbon Film	1.5 kohm	1/5W	J	2	
R605	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R606	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R608	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R609 L/R	3069152970	Carbon Film	1.5 kohm	1/5W	J	2	
R610/R611	3069622970	Carbon Film	6.2 kohm	1/5W	J	2	
	054020410060	**Ass'y P.C.Board Tone**					P,T,INDO,KS,D
59	3208049910	Volume Rotary	2				
C701/C702	3679123120	Mylar	0.012 µF	100V	J	2	
C703/C704	3679182120	Mylar	0.0018 µF	100V	J	2	
C705/C706	3679823120	Mylar	0.082 µF	100V	J	2	
C707/C708	3679153120	Mylar	0.015 µF	100V	J	2	
C709/C710	3479310131	Electrolytic SG	100 µF	16V	M	2	
C711	3479247971	Electrolytic SA	4.7 µF	50V	M	1	
C712	3479222971	Electrolytic SA	2.2 µF	50V	M	1	
C713	3479210071	Electrolytic SA	10 µF	50V	M	1	
C714	3519560935	Ceramic Tubular	56 pF	50V	J	1	
C715	3679105297	Mylar	1 µF	63 V	J	1	
C716/C717	3519560935	Ceramic Tubular	56 µF	50V	J	2	
C718	3679105297	Mylar	1 µF	63V	J	1	
C719	3479210071	Electrolytic SA	10 µF	50V	M	1	
C720	3479222971	Electrolytic SA	2.2 µF	50V	M	1	
C721	3519560935	Ceramic Tubular	56 pF	50V	J	1	
C723/C724	347924871	Electroly SA	0.47 µF	50V	M	2	
CNT701	435208558732	Sead ASS'Y 8P 550mm				1	
GND701	4235007210	Terminal Ground				1	
IC701	2168220135	NJM5532D				1	
R701/R702	3069512970	Carbon Film	5.1 kohm	1/5W	J	2	
R704	3069332970	Cabon Film	3.3 kohm	1/5W	J	1	
R706/R707	3069362970	Carbon Film	3.6 kohm	1/5W	J	2	
R708	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R710/R711	3069223970	Carbon Film	22 kohm	1/5W	J	2	
R712	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R713	3069471970	Carbon Film	470 ohm	1/5W	J	1	
R714/R715	3069202970	Carbon film	2 kohm	1/5W	J	2	
R716	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R717	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R718	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R719	3069753970	Carbon Film	75 kohm	1/5W	J	1	
R720	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R721	3069753970	Carbon Film	75 kohm	1/5W	J	1	
R722	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R723	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R724	3069105970	Carbon Film	1 Mohm	1/5W	J	1	
R725	3069471970	Carbon Film	470 ohm	1/5W	J	1	
	054020410061	**Ass'y P.C.Board Power Swith**					P,T,INDO,KS,D
SW1	4658003710	Switch Tact				4	
R801/R802	3069132970	Carbon Film	1.3 kohm	1/5W	J	2	
CNT501	4428516610	Wafer 7P				1	
LED801	2371124701	LED, SLR-34URCF25, Center Speaker ON/OFF				1	
LED802	2371124701	LED, SLR-34URCF25, Rear Speaker ON/OFF				1	
	054020410062	**Ass'y P.C.Board Volume LED**					P,T,INDO,KS,D
LED803	2308220140	LED,SLC-22VR5				1	
CNT804	4358102184	Lead Wire 2P 180mm				1	
	054020410063	**Ass'y P.C.Board Headphone**					P,T,INDO,KS,D
49	4438005010	Jsck Phone				1	
C808	3519471935	Ceramic Tubular	470 pF	50V	J	1	

Ref. No.	Part No.	Description				Q'ty	Version
C810	3519471935	Ceramic Tubular	470 pF	50V	J	1	
CNT803	43203453132	Lead Ass'y 3P 450mm				1	
R803	3069100970	Carbon Film	10 ohm	1/5W	J	1	
R804	3069100970	Carbon Film	10 ohm	1/5W	J	1	
	15622101057	Wire Reg, #22, Black, 100mm				1	
	054020410064	**Ass'y P.C.Board imput**					P,T,INDO,KS,D
31	7505206120	Heatsink				2	
35	4438104210	Jsck RCA 4P				1	
42	4438105910	Jack RCA 6P				3	
C801-C813	3679333120	Mylar	0.033 µF	100V	J	3	
C814	3479310161	Electrolytic SG	100 µF	35V	M	1	
C815/C816	340932269	Electroltic SG	2200 µF	35V	M	2	
C818 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C820 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C822 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C824 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C825 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C827 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C828 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C830 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C831 L/R	3519101935	Ceramic Tubular	100 pF	50V	J	2	
C836	3519103935	Ceramic Tubular	0.01 µF	50V	Z	1	
C837	3479210971	Electrolytic SA	1 µF	50V	M	1	
C838/C839	3479347041	Electrolytic SG	47 µF	25V	M	2	
C840 L/R	3479210071	Electrolytic SA	10 µF	50V	M	2	
C841/C842	3479310131	Electrolytic SG	100 µF	16V	M	2	
C843 L/R	3679105297	Mylar	1 µF	63V	J	2	
C844 L/R	3679105297	Mylar	1 µF	63V	J	2	
C845/C846	3479347041	Electrolytic SG	47 µF	25V	M	2	
CNT101	4428516710	Wefer 8P				1	
CNT105	4428525530	Wefer 3P				1	
CNT106	442852510	Wefer 11P				1	
CNT301	4428505710	Wefer 3P				1	
CNT303	436208183332	Lead Ass'y 8P 180mm				1	
CNT308	4428525530	Wefer 3P				1	
D801-D806	2258100135	1N4002, Rectifier				6	
D807	2058322101	1N4148M, Switching Diode				1	
F301/F302	5508202430	⚠Fuse, NB 2A 250V				2	KS
	5508302435	⚠Fuse, T 2A 250V				2	P,T,INDO,D
GNT302	4235007210	Terminal Ground				1	
GND801	4235007210	Terminal Ground				1	
IC305	2168220135	NJM5532D				1	
IC801 ⚠	2168601105	GL7815, Regulator				1	
IC802 ⚠	2168601111	GL7915, Regulator				1	
IC803/IC804	2168017132	LC7821				2	
PLUG201	442852860	CNT Plug AC 1P				1	
R805	302922472	Metal Film	2.2 kohm	1W	J	1	
R806/R807	3029479472	Metal Film	4.7 ohm	1W	J	2	
R808 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R809 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	
R810 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R811 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	
R813 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R814 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	
R815 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R816 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	
R817 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R818 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R819 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	
R820 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R821 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R825 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	
R826 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R827 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	

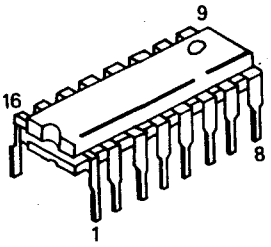
Ref. No.	Part No.	Description				Q'ty	Version
R828	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R829/R830	3069221970	Carbon Film	220 ohm	1/5W	J	2	
R831/R832	3069561970	Carbon Film	100 ohm	1/5W	J	2	
R833 L/R	3069913970	Carbon Film	91 kohm	1/5W	J	2	
R835/R836	3069221970	Carbon Film	220 ohm	1/5W	J	2	
	4255001010	Clip Fuse, PFC5000-0202				4	
	054020410065	**Ass'y P.C.Board Supply**					P,T,INDO,KS,D
	4175701108	Lead Wire 100mm, Black 2					
SW2	4618006510	Switch Slide				1	Ks,P,T INDO
SW3	4618006510	Switch Slide				1	Ks,P,T INDO
	4228001410	AC Cord + Pin Solder				1	
	4228001410	AC Cord - Pin Solder				1	
C401	3549472410	Mylar	0.0047 µF	400V	Z	1	
C402	3519103450	Ceramic Disc	0.01 µF	500V	Z	1	
C405	3409322239	Electrolytic SG	2200 µF	16V	M	1	
C407	3479322071	Electrolytic SG	22 µF	50V	M	1	
C408/C409	3679333120	Mylar	0.033 µF	100V	J	2	
C410	3479210971	Electrolytic SA	1 µF	50V	M	1	
C411	3479310161	Electrolytic SG	100 µF	35V	M	1	
C412	3549472410	Mylar	0.0047 µF	400V	Z	1	
CNT502	4428516510	Wafer 6P				1	
D401-D404	2058100136	1N5402, Rectifier				4	
D405-D409	2258100135	1N4002, Rectifier				5	
D410	2258599130	Zener, UZ 7.5BSC				1	
D411	2258100135	1N4002, Rectifier				1	
D412/D413	225899109	Zener, UZ 15BSC				2	
D414	2258100135	1N4002, Rectifier				1	
F401 ⚠	5508202830	Fuse, NB 3.5A 250V				1	KS
⚠	5508302735	Fuse, T 3.15A 250V				1	P,T,INDO
F402 ⚠	5508202830	Fuse, NB 3.5A 250V				1	KS
⚠	9057078572	Fuse, T 6.3A 250V				1	P,T,INDO
⚠	5508302735	Fuse, T 3.15A 250V				1	D
F403 ⚠	5508201630	Fuse, NB 0.5A 250V				1	KS
⚠	5508301634	Fuse, T 0.5A 250V				1	P,T,INDO,D
GND401	4235007210	Terminal Ground				1	
PLUG109	4428525790	Wafer LV 3P				1	
PLUG401	4428525780	Wafer LV 2P				1	
PLUG402	4428525780	Wafer LV 2P				1	
PLUG403	4428525780	Wafer LV 2P				1	
PLUG404	4428505610	Wafer 4P				1	
CNT402	4358805016	Connector Ass'y LV 2P 160mm				1	KS
CNT402	4358880216	Connector Ass'y LV 2P 160mm				1	P,T,INDO,D
Q401	2208606114	MPSA06, NPN, Silicon				1	
R401	3029100472	Metal Film	10 ohm	1W	J	1	
R402	3029330572	Metal Film	33 ohm	2W	J	1	
R403	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R404	3069202970	Carbon Film	2 kohm	1/5W	J	1	
R405	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R406	3069331970	Carbon Film	330 ohm	1/5W	J	1	
R407	3029100472	Metal Film	10 ohm	1W	J	1	
⚠ RELAY401	5528001640	Relay, OSZ-SS-112DM8(TV-8)				1	
⚠ RELAY402	5528001620	Relay, OST-S-112DM(TV-3)				1	
ST/BY ⚠	2828072607	Stand-by Transformer 110/220V 50/60Hz				1	KS,P,T,INDO
⚠	2828000077	Stand-by Transformer 230V 50Hz				1	D
	4255001010	Clip Fuse, PFC5000-0202				4	KS,D
	4255001010	Clip Fuse, PFC5000-0202				6	KS,P,T,INDO
	054020410066	**Ass'y P.C.Board VCR Front**					P,T,INDO,KS,D
50	4438109710	Jack RCA 3P				1	
63	320805010	Volume rotary				1	
C801	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	
C802	3519101935	Ceramic Tubular	100 pF	50V	J	1	
C804	3519101935	Ceramic Tubular	100 pF	50V	J	1	
C806	3519104935	Ceramic Tubular	0.1 µF	50V	Z	1	

Ref. No.	Part No.	Description	Q'ty	Version
CNT801	436204148332	Lead Ass'y 4P 140mm, Shield	1	
CNT802	435206458532	Lead Ass'y 6P 450mm	1	
	152624102457	Wire Reg, # 24, Black, 240mm	1	
	054020410067	**Ass'y P.C.Board Outler**	1	P.T.INDO,D
6	⚠ 4448100410	AC Outlet	1	D
	⚠ 4448103610	AC Outlet	1	P.T.INDO
44	⚠ 4448103610	AC Outlet	1	P.T.INDO
	⚠ 4448105410	AC Outlet	1	D
F901	⚠ 5508303235	Fuse, T 6.3A 250V	1	P.T.INDO,D
F902	⚠ 5528302835	Fuse, T 2.5A 250V	1	P.T.INDO,D
CNT402	4428525780	Wafer LV 2P	1	P.T.INDO,D
WIRE901	4359012010	Wire 1P 100mm, Black	1	P.T.INDO,D
WIRE902	4359012910	Wire 1P 100mm, White	1	P.T.INDO,D
	4255001010	Clip Fuse, PFC5000-0202	4	

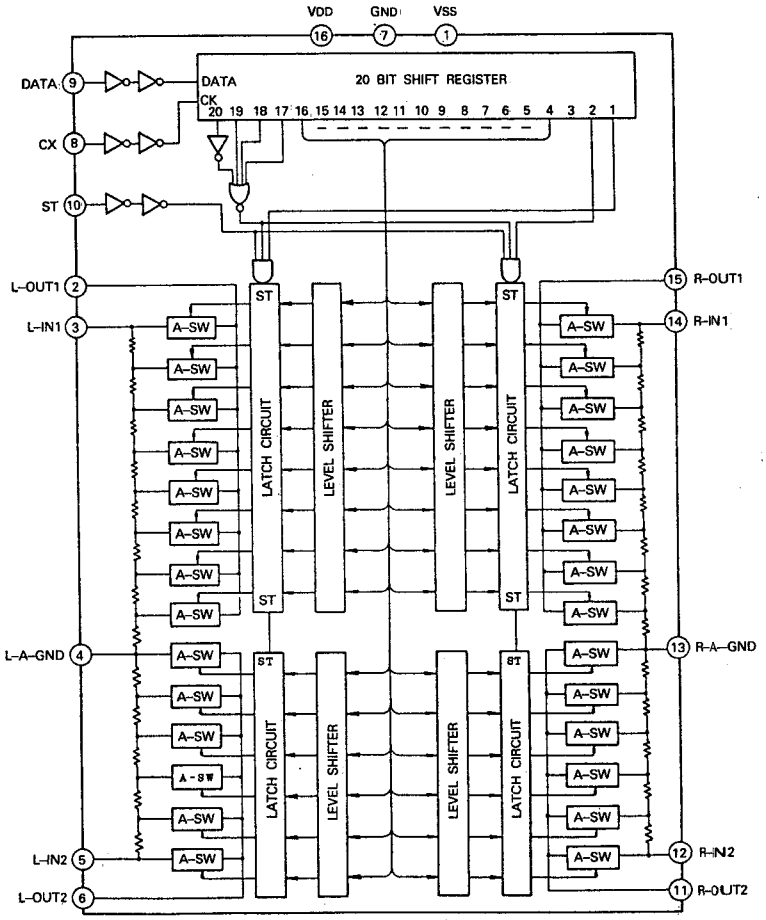
SEMICONDUCTOR LEAD IDENTIFICATION & INTERNAL DIAGRAM

TC9176P: IC408 (Electical Volume)

Package Outline

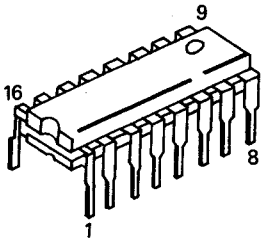


Block Diagram

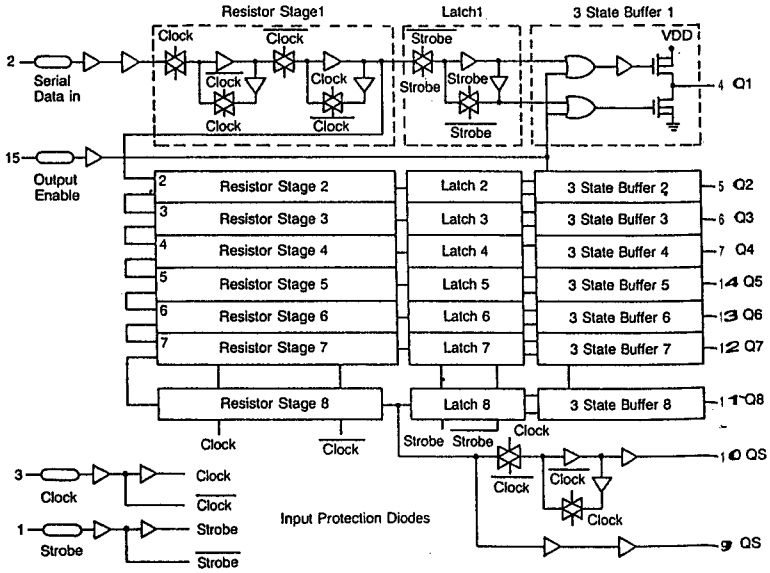


MC14094BCP: IC106, IC107, IC403 (8-Stage shift/store Registor with Tri-state Outputs)

Package Outline

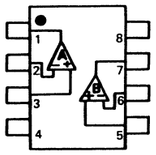


Block Diagram



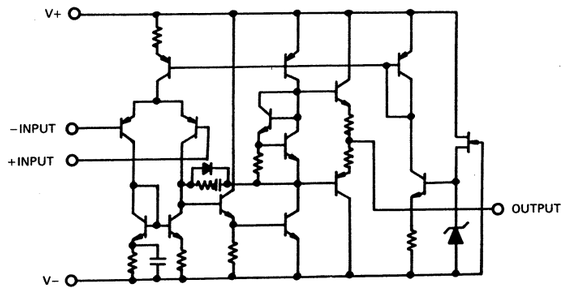
NJM2068DD: IC101 (High performance dual low noise operational amplifier)

(TOP VIEW)



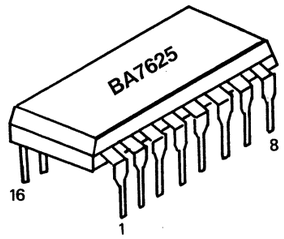
1. A OUTPUT
2. A −INPUT
3. A +INPUT
4. V−
5. B+ INPUT
6. B− INPUT
7. B OUTPUT
8. V+

Equivalent Circuit **Block Diagram**

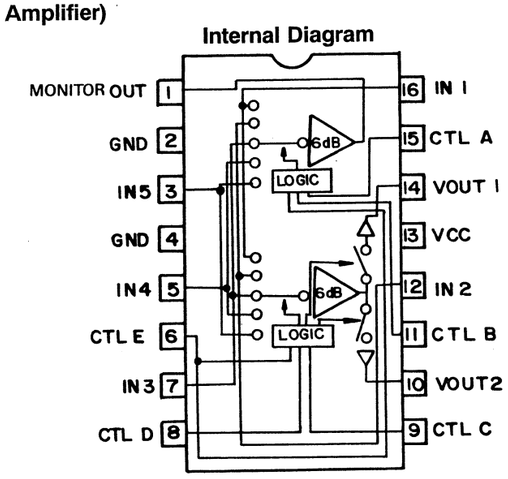


BA7625: IC102(Video signal switch for AV Amplifier)

Package Outline

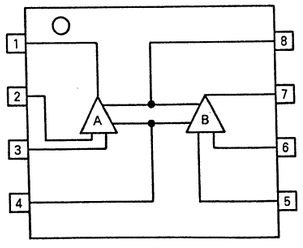


Internal Diagram



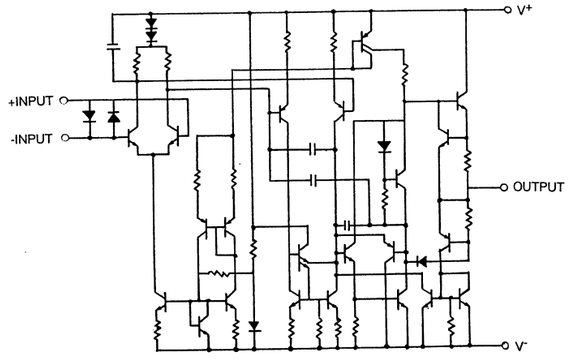
NJM5532D: IC108, IC701, IC305 (High performance dual low noise operational amplifier)

Internal Diagram



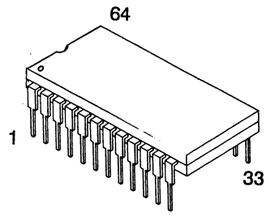
1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. V⁻
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V⁺

Block Diagram

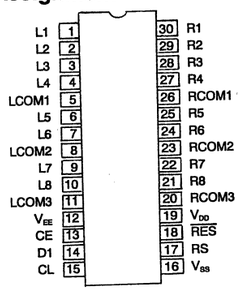


LC7821: IC803, IC804 (Analog Function Switch)

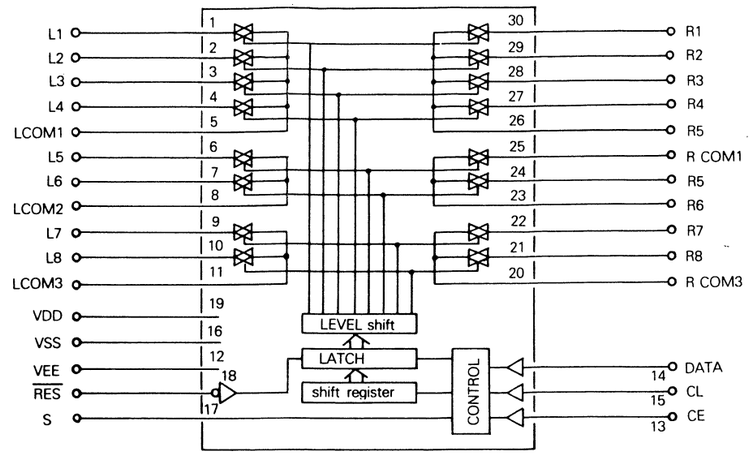
Package Outline



Pin Assignment

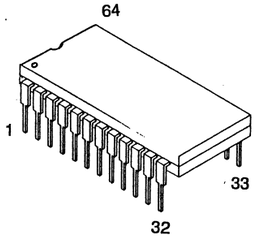


Block Diagram

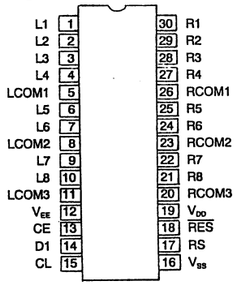


LC7822: IC105 (Analoge Function Switch)

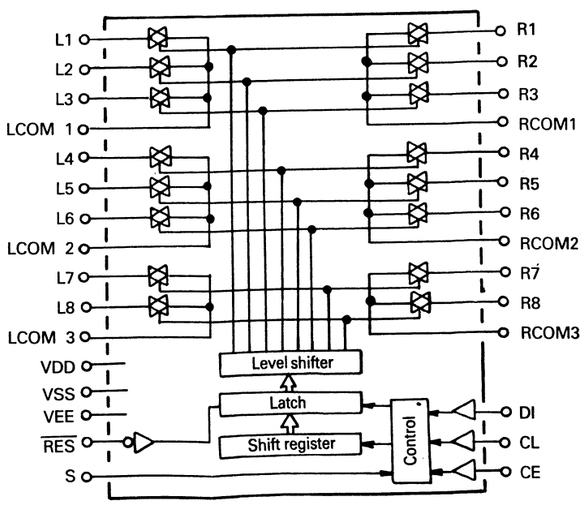
Package Outline



Pin Assignment

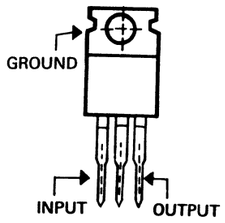


Block Diagram

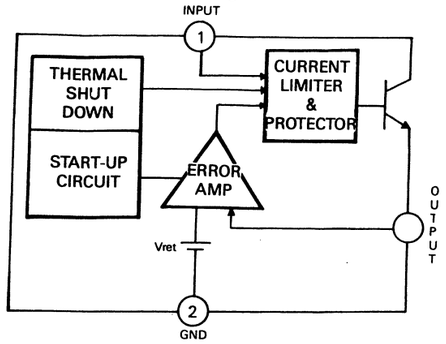


GL7815: IC801 (Requlator)

Front View

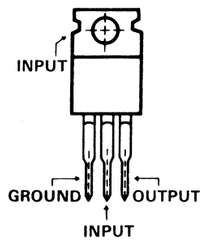


Block Diagram

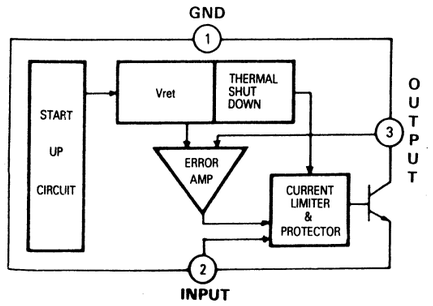


GL7915: IC802(Regulator)

Front View

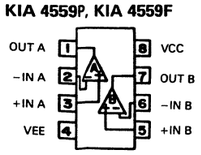


Block Diagram

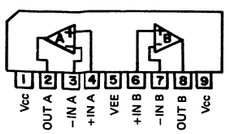


KIA4559/KTA75559P: IC103, IC109, IC402, IC406, IC409, IC110
KIA6259P (OP Amprifier)

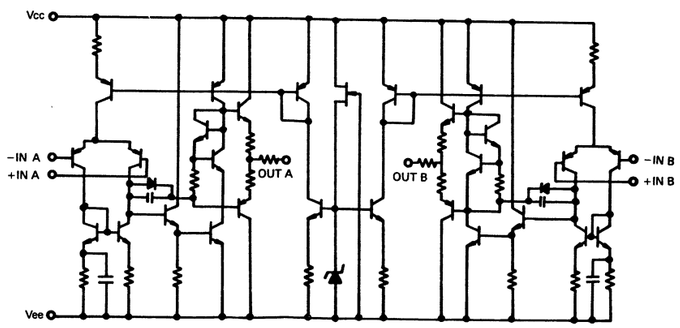
KIA 4559P, KIA 4559F



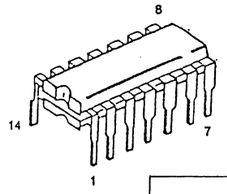
KIA 4559S



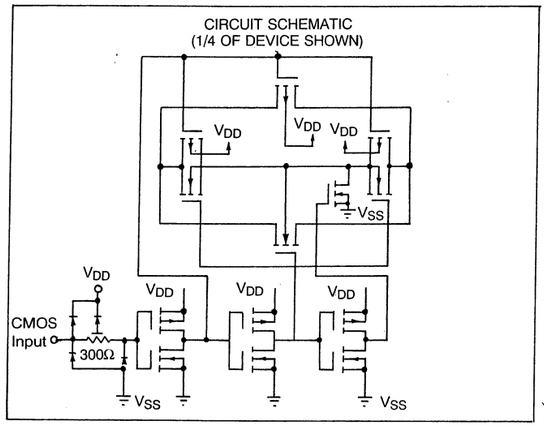
Equivalent Circuit

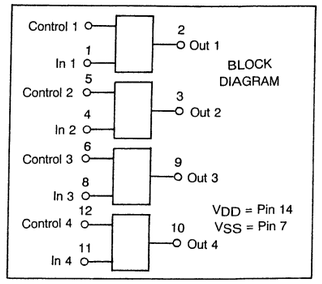


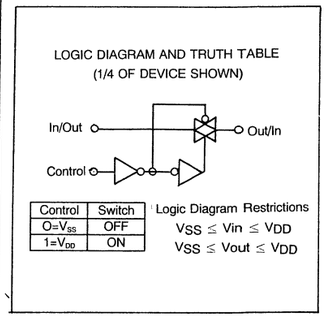
MC14066BCP: IC111, IC401, IC407 (Quad analog switch)



Circuit Schematic





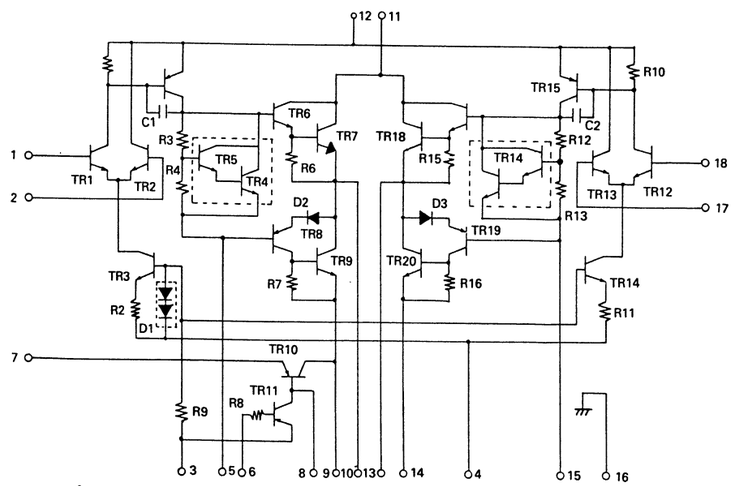


Control	Switch
O=V_{SS}	OFF
1=V_{DD}	ON

Logic Diagram Restrictions
$V_{SS} \leq Vin \leq V_{DD}$
$V_{SS} \leq Vout \leq V_{DD}$

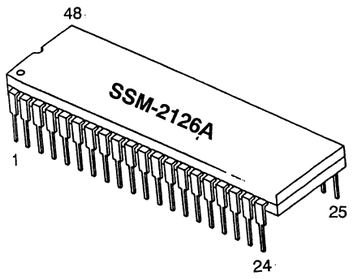
STK4192 Ⅱ : IC112 (2 Channel 50W AF amplifier)

Block Diagram

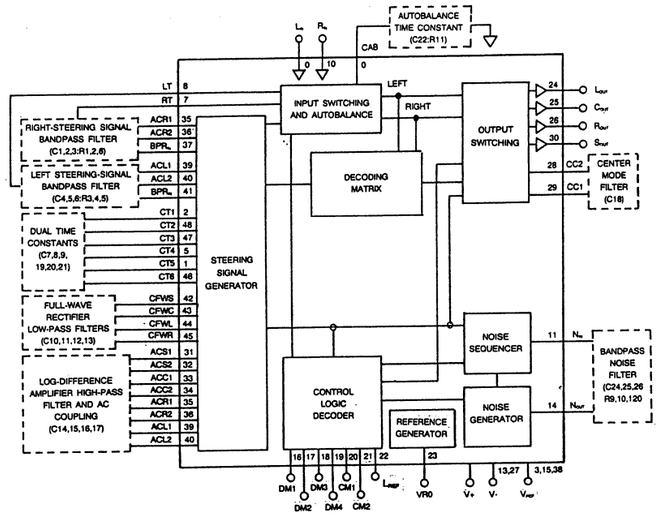


SSM2126A: IC104

Packge Outline

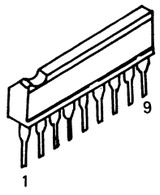


Block Diagram

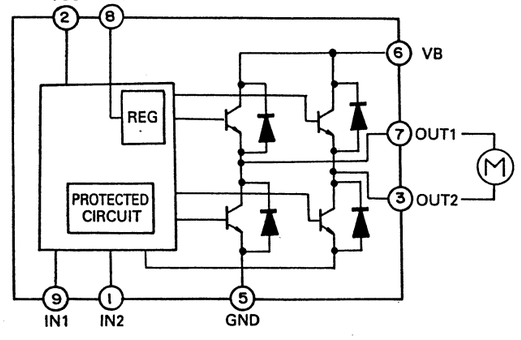


TA7291S: IC601

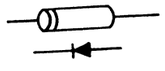
Package Outline



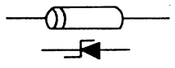
Block Diagram

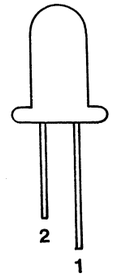


IN5402
IN4002
IN4148



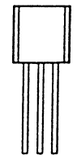
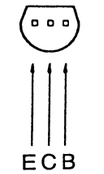
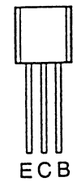
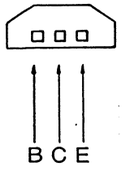
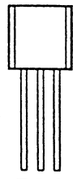
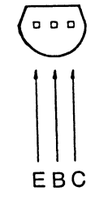
Zener Diode





1. ANODE
2. CATHODE

TRANSISTORS LEAD IDENTIFICATION

TRANSISTOR	FRONT VIEW	BOTTOM VIEW
KTA949/KTA1024 KTA1015/KTA1266 KTC1815/KTC3198 KTD/302 KTC2240 KTC2229 KTC2235 KTA965		
DTC114YS DTA114YS		
MPSA06 MPSA56		

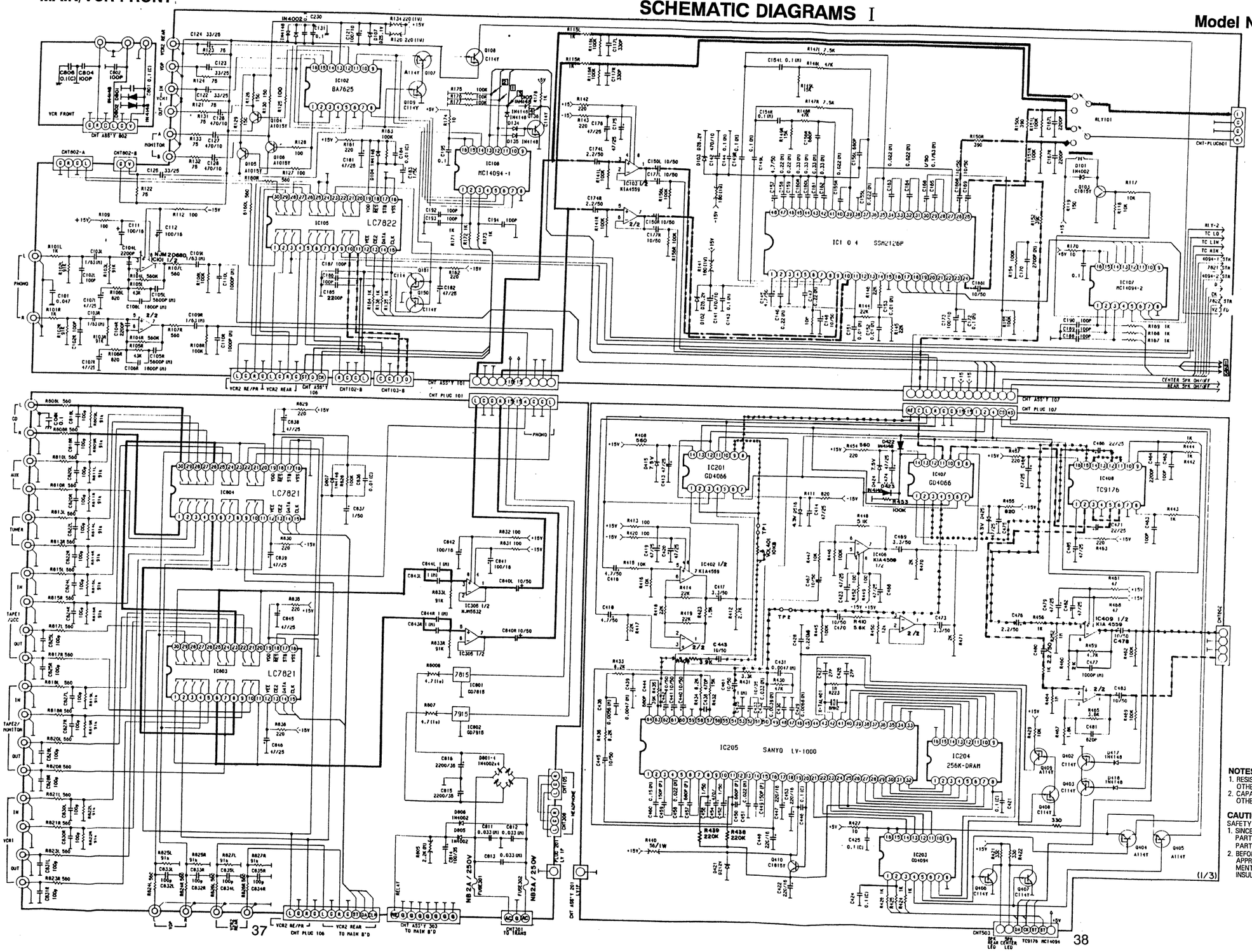
TERMINAL NAME

B → BASE
C → COLLECTOR
E → EMITTER

MAIN/VCR FRONT

SCHEMATIC DIAGRAMS I

Model No.: AVP-8500G/B



NOTES:

1. RESIST ANCE VALUES ARE INDICATED IN ohms UNLESS OTHERWISE SPECIFIED (k=1,000, M=1,000, 000)
2. CAPACIT ANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED (pMICRO-MICRO FARADS).

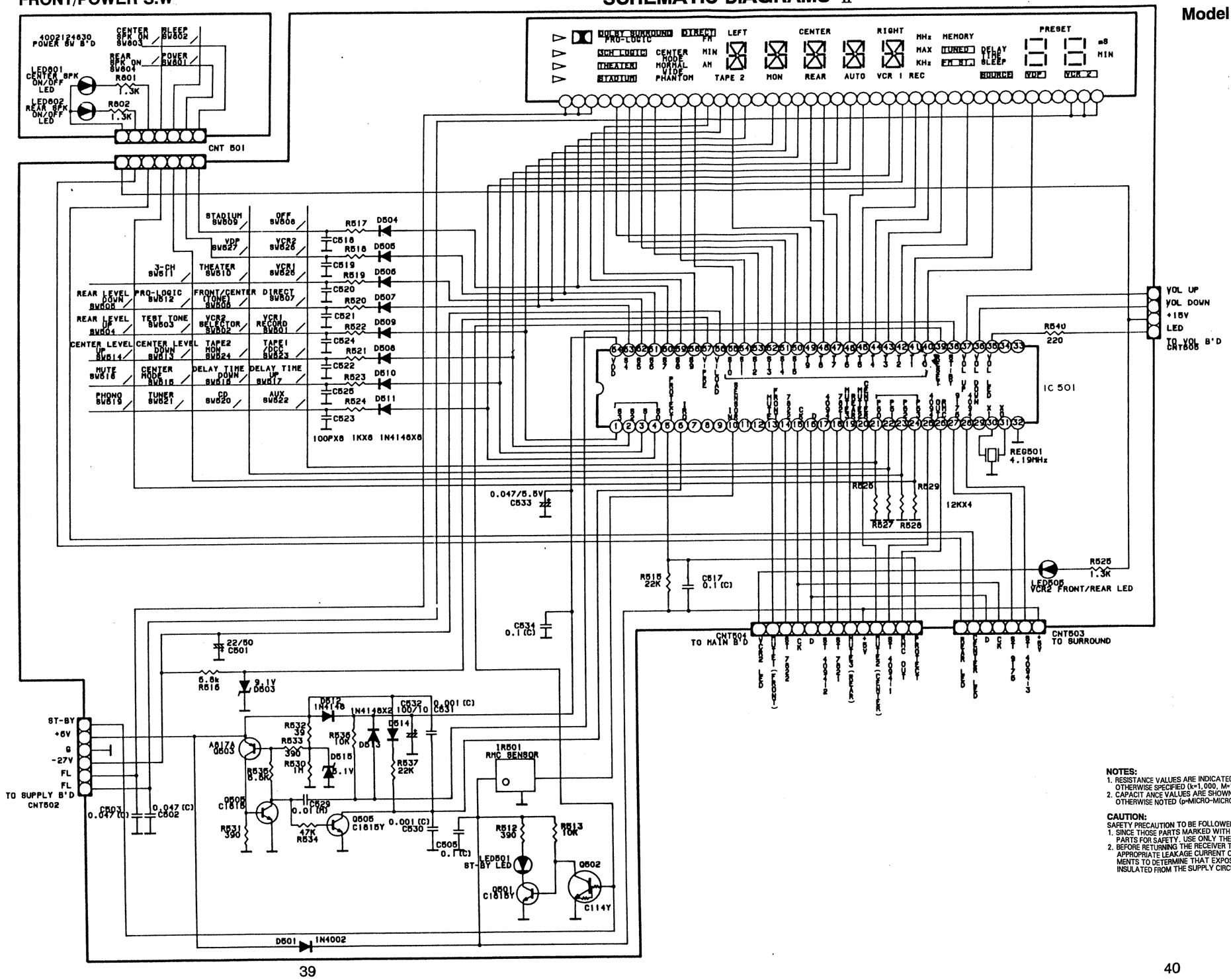
CAUTION:

SAFETY PRECAUTION TO BE FOLLOWED DURING SERVICING.

1. SINCE THOSE PARTS MARKED WITH ⚠ ARE CRITICAL PARTS FOR SAFETY. USE ONLY THE ONE DESCRIBED IN THE PARTS LIST.
2. BEFORE RETURNING THE RECEIVER TO THE CUSTOMER, MAKE APPROPRIATE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.

(1/3)

SCHEMATIC DIAGRAMS II



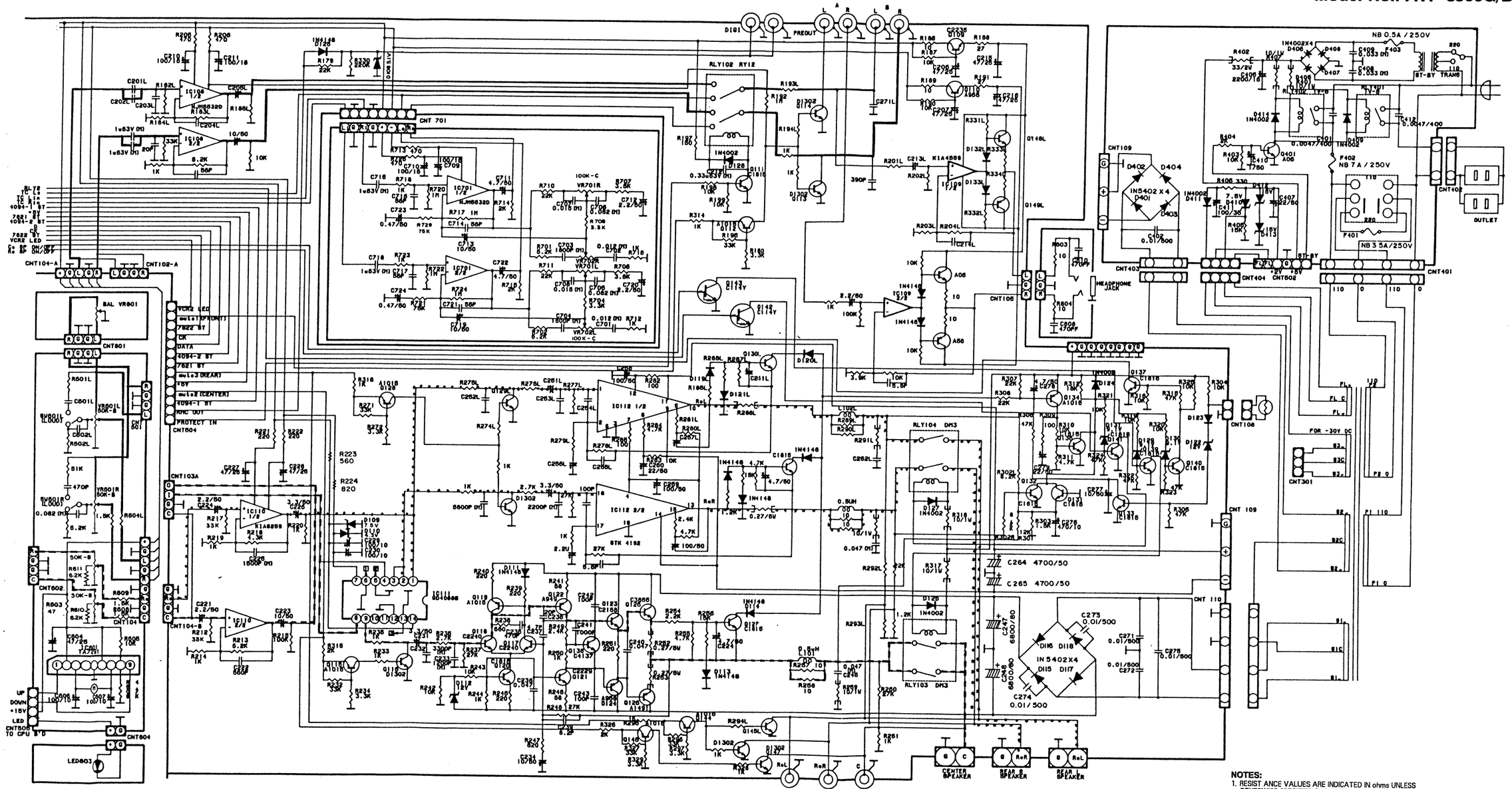
NOTES:
1. RESISTANCE VALUES ARE INDICATED IN ohms UNLESS OTHERWISE SPECIFIED (k=1,000, M=1,000,000)
2. CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED (p=MICRO-MICRO FARADS).

CAUTION:
SAFETY PRECAUTION TO BE FOLLOWED DURING SERVICING.
1. SINCE THOSE PARTS MARKED WITH ⚠ ARE CRITICAL PARTS FOR SAFETY, USE ONLY THE ONE DESCRIBED IN THE PARTS LIST.
2. BEFORE RETURNING THE RECEIVER TO THE CUSTOMER, MAKE APPROPRIATE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.

SURROUND/TONE/MAIN/VOLUME/HEADPHONE/SUPPLY

SCHEMATIC DIAGRAMS III

Model No.: AVP-8500G/B



NOTES:

1. RESIST ANCE VALUES ARE INDICATED IN ohms UNLESS OTHERWISE SPECIFIED (k=1,000, M=1,000,000)
2. CAPACIT ANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED (p=MICRO-MICRO FARADS).

CAUTION:

SAFETY PRECAUTION TO BE FOLLOWED DURING SERVICING.

1. SINCE THOSE PARTS MARKED WITH △ ARE CRITICAL PARTS FOR SAFETY, USE ONLY THE ONE DESCRIBED IN THE PARTS LIST.
2. BEFORE RETURNING THE RECEIVER TO THE CUSTOMER, MAKE APPROPRIATE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.